MATCH LINE DRAWING C-106

MATCH LINE DRAWING C-105

BB = 5.47 Ac

GRASS

TOWN PROPERTY

OLIVER CREEK ROAD

OBSCURED

SWALE 2

EXISTING ROAD

SITE BOUNDARY

PROPOSED TEMPORARY HAY BALE CHECK DAM FOR DETAILS SEE DWG C-112

CULVERT 15"CMP ELEV= 42.58'

PROPOSED 24' WIDE DOUBLE SWING GATE (TYP) FOR DETAIL, SEE DWG C-116

PROPOSED ROAD

DRAINAGE AREA 5
87.24 ACRES

PROPOSED SOLAR PANEL FIELD - DRIVEN (TYP)
FOR PANEL DETAILS SEE DWG C-113

MIRA PROPERTY

WOODED

P = 4.48 Ac

MATCH LINE DRAWING C-108

MATCH LINE DRAWING C-110

CB RIM= 54.58 DEPTH=50.98 INV.1=51.28 INV.2=PLUGGED

CB RIM= 54.71 DEPTH=50.91 INV.1=51.01 INV.2=50.81 INV.3=51.01

CB RIM= 56.60 DEPTH=50.50 INV.1=52.60

CB RIM= 57.07 DEPTH=47.97 INV.1=48.17 INV.2=48.17 INV.3=51.67

CB RIM= 56.58 DEPTH=46.08 INV.1=47.68 INV.2=47.48

CB RIM= 53.92 DEPTH=44.82 INV.1=45.22 INV.2=45.22

WE-7730

WE-3247

WE-3248

WE-3249

WE-3250

WE-3250S

PROPOSED MEDIUM VOLTAGE CABLE (TYP)

PROPOSED SOLAR PANEL FIELD - BALLAST (TYP)
FOR PANEL DETAILS SEE DWGS C-113

PROPOSED 7' HIGH FENCE (TYP)
FOR DETAIL SEE DWG C-116

ALLNEX PROPERTY

PROPOSED PADS FOR TRANSFORMER AND INVERTERS (TYP)
FOR DETAIL SEE DWG C-114

A = 4.39 Ac

CB RIM=57.70 DEBRIS=53.0

CB RIM= 58.15 DEBRIS=54.0

CB RIM= 58.33 DEBRIS=54.0

NOTE:
FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE DRAWING G-002.

40 20 0 40 80
SCALE: 1" = 40'

FOR PERMITTING PURPOSES ONLY
- NOT FOR CONSTRUCTION -

TETRA TECH
www.tetratech.com
160 Federal Street, 3rd Floor
Boston, MA 02110
Phone: (617) 443-7500 Fax: (617) 737-3480

PREPARED FOR:
Wallingford Renewable Energy LLC
909 Lake Carolyn Pkwy, Suite 260
Irving, Texas 75039

MARK	DATE	DESCRIPTION	BY
A	01/05/18	ISSUED FOR PERMITTING AND REVIEW	JS

WALLINGFORD RENEWABLE ENERGY
NEW HAVEN COUNTY, WALLINGFORD, CONNECTICUT

SOLAR PANEL LAYOUT CONFIGURATION
GENERAL SITE PLAN

Project No.:	194-9002
Designed By:	JS, KMT
Drawn By:	FGM, DS
Checked By:	JS, LG

C-107

CAD FILE: 9002-WRE_C101-C110-REV A.DWG

1/5/2018 1:53:00 PM - D:\CAD-TEMP FILES\PROJECTS__WRE-SOLAR LEASSE AREA\WORKING\PERMIT DRAWINGS_REV A - REVISED SITE_121117\WORKING\9002-WRE_C101-C110-REV A.DWG - MENICHELLI, FOSTER

MATCH LINE DRAWING C-106

PROPOSED TEMPORARY HAY BALE CHECK DAM FOR DETAILS SEE DWG C-112

SWALE 2

250' CONN LIGHT & POWER COMPANY ROW

MONITORING POINT-003

OBSCURED

WALL

PROPOSED SOLAR PANEL FIELD - BALLAST (TYP) FOR PANEL DETAILS, SEE DWG C-113

TOWN PROPERTY

EXISTING ROAD

PROPOSED 7' HIGH FENCE (TYP) FOR DETAIL SEE DWG C-XXX

GAS COMPRESSOR STATION

PROPOSED MEDIUM VOLTAGE CABLE FOR DETAIL SEE DWG C-XXX

PROPOSED ROAD

PROPOSED 24' WIDE DOUBLE SWING GATE (TYP) FOR DETAIL SEE DWG C-116

S1 = 0.25 Ac

S2 = 0.11 Ac

S3 = 1.15 Ac

80' ALGONQUIN GAS CO ROW

20' GULF OIL ROW

MIRA PROPERTY

PROPOSED SOLAR PANEL FIELD - DRIVEN (TYP) FOR PANEL DETAILS, SEE DWG C-113

PROPOSED 7' HIGH FENCE (TYP) FOR DETAIL SEE DWG C-116

MATCH LINE DRAWING C-109

MATCH LINE DRAWING C-107

MATCH LINE DRAWING C-110

SCALE: 1" = 40'

NOTE:
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WALLINGFORD RENEWABLE ENERGY
NEW HAVEN COUNTY, WALLINGFORD, CONNECTICUT

SOLAR PANEL LAYOUT CONFIGURATION GENERAL SITE PLAN

Project No.:	194-9002
Designed By:	JS, KMT
Drawn By:	FGM, DS
Checked By:	JS, LG

C-108

CAD FILE: 9002-WRE_C101-C110-REV A.DWG

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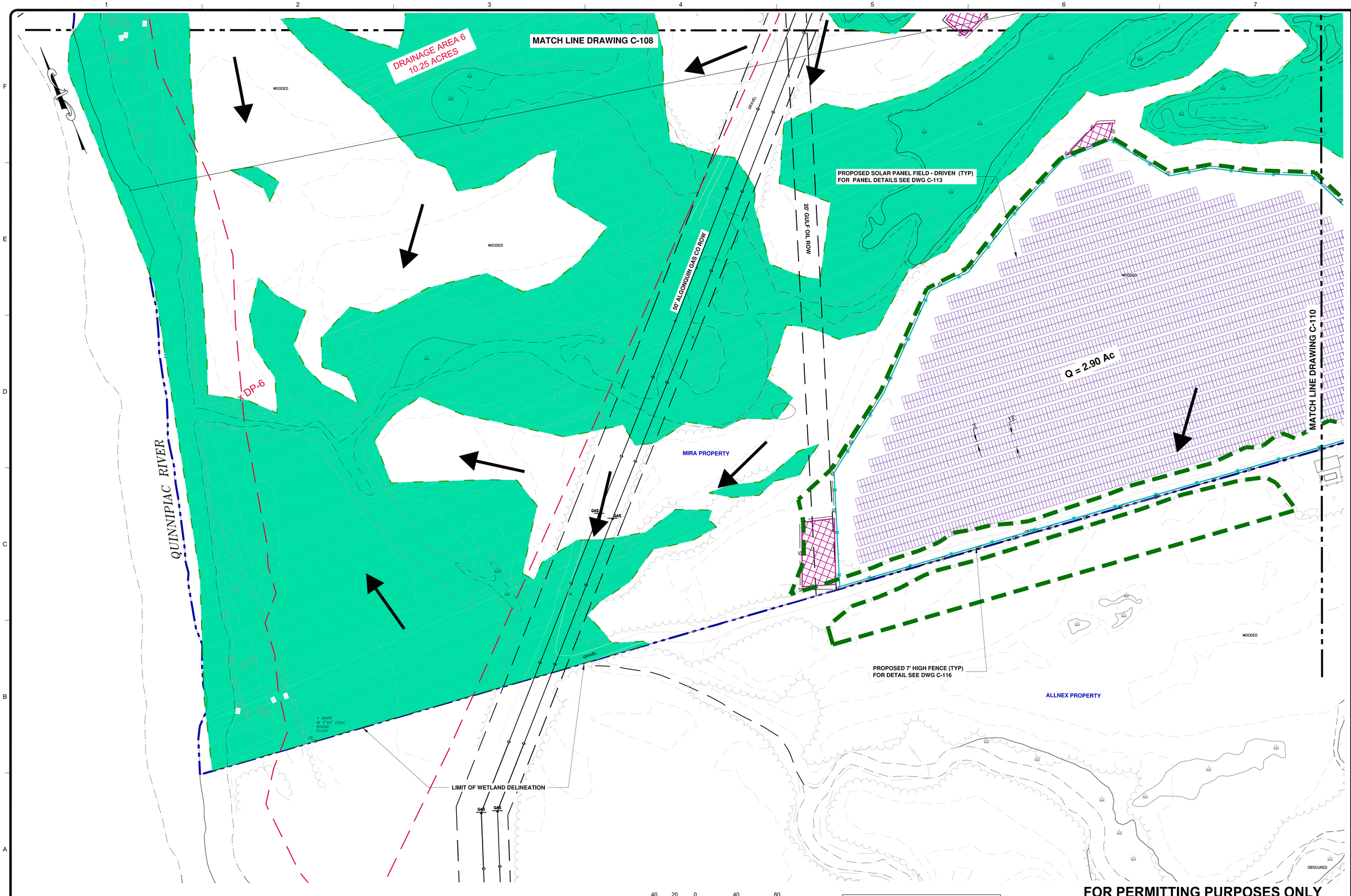

40 20 0 40 80

SCALE: 1" = 40'

NOTE:
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WALLINGFORD RENEWABLE ENERGY
NEW HAVEN COUNTY, WALLINGFORD, CONNECTICUT

SOLAR PANEL LAYOUT CONFIGURATION
GENERAL SITE PLAN

Project No.:	194-9002
Designed By:	JS, KMT
Drawn By:	FGM, DS
Checked By:	JS, LG

C-109

MATCH LINE DRAWING C-107

MATCH LINE DRAWING C-108

MATCH LINE DRAWING C-109

MIRA PROPERTY

ALLNEX PROPERTY

PROPOSED PAD FOR TRANSFORMER AND INVERTERS (TYP)
FOR DETAIL SEE DWG C-114

PROPOSED MEDIUM VOLTAGE CABLE (TYP)

PROPOSED SOLAR PANEL FIELD - DRIVEN (TYP)
FOR PANEL DETAILS SEE DWG C-113

PROPOSED 24' WIDE
DOUBLE SWING GATE (TYP)
FOR DETAIL SEE DWG C-116

PROPOSED ROAD

EXISTING ROAD

SITE BOUNDARY

LIMIT OF WETLAND DELINEATION

OBSCURED

WOODED

GRAVEL

OHW

SCALE: 1" = 40'

NOTE:
FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE DRAWING G-002.

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WALLINGFORD RENEWABLE ENERGY
NEW HAVEN COUNTY, WALLINGFORD, CONNECTICUT

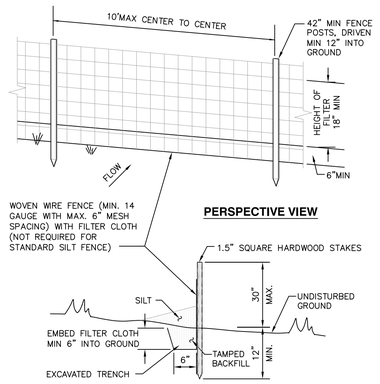
SOLAR PANEL LAYOUT CONFIGURATION GENERAL SITE PLAN

Project No.:	194-9002
Designed By:	JS, KMT
Drawn By:	FGM, DS
Checked By:	JS, LG

C-110

CAD FILE: 9002-WRE_C101-C110-REV A.DWG

1/5/2018 2:01:30 PM - D:\CAD-TEMP FILES\PROJECTS_WRE-SOLAR LEASSE AREA\WORKING\PERMIT DRAWINGS_REV A - REVISED SITE_121117\WORKING\9002-WRE_C101-C110-REV A.DWG - MENICHELLI, FOSTER



PERSPECTIVE VIEW

SECTION

NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING. FILTER CLOTH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIALS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. INSPECT SILT FENCE AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAINFALL OF 0.5" OR GREATER.
4. SILT FENCE SHALL BE USED WHERE EROSION COULD OCCUR IN THE FORM OF SHEET EROSION.
5. SILT FENCE SHALL NOT BE USED WHEN A CONCENTRATION OF WATER IS FLOWING TO THE BARRIER AND SOIL CONDITIONS ALLOW FOR PROPER KEYING OF FABRIC, OR OTHER ANCHORAGE, TO PREVENT BLOWOUTS. SILT FENCE NOT TO BE USED IN DRAINAGE WAYS SUPPORTED BY GROUNDWATER FLOWS.
6. THE TYPE OF SILT FENCE SHALL NOT EXCEED THE MAXIMUM SLOPE LENGTH AND WING SPACING REQUIREMENTS SHOWN IN THE FOLLOWING TABLE.

SLOPE STEEPNESS[1]	SLOPE LENGTH AND WING SPACING (FT)
5:1 OR FLATTER	100
3:1 TO 5:1	75
2:1 TO 3:1	50

1. WHERE THE GRADIENT CHANGES THROUGH THE DRAINAGE AREA THE STEEPEST SLOPE SHALL BE USED.

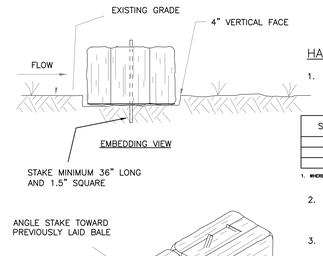
GEOTEXTILE SILT FENCE

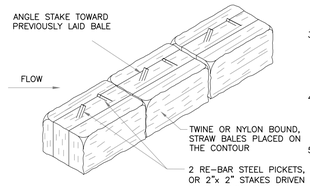
DETAIL 1 / -

SCALE: N.T.S.

SYMBOL

——— SF ———





HAY BALE NOTES:

1. CONTRIBUTING DRAINAGE AREA IS LESS THAN 1 ACRE. THE LENGTH OF THE MAXIMUM CONTRIBUTING SLOPE IS:

SLOPE STEEPNESS[1]	SLOPE LENGTH AND WING SPACING (FT)
5:1 OR FLATTER	100
3:1 TO 5:1	75
2:1 TO 3:1	50

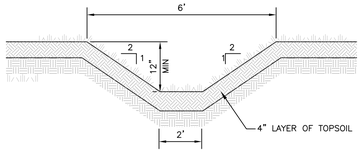
1. WHERE THE GRADIENT CHANGES THROUGH THE DRAINAGE AREA THE STEEPEST SLOPE SHALL BE USED.

2. BALES SHALL BE MADE OF HAY OR STRAW WITH 40LBS MIN. WEIGHT AND 120LBS MAXIMUM WEIGHT.
3. THE HAY BALE BARRIER SHALL BE CONSTRUCTED SO WATER CANNOT BYPASS THE BARRIER AROUND THE ENDS AND 5'-10' DOWN GRADIENT OF TOE OF SLOPE.
4. INSPECTION SHALL OCCUR AT LEAST ONCE PER WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH GREATER THAN .5" OF PRECIPITATION.
5. THE HAY BALE BARRIER SHALL BE MAINTAINED UNTIL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
6. BALES SHALL BE PLACED IN A SINGLE ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES AND BINDNGS ORIENTED AROUND THE SIDES.
7. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES.
8. BALES SHALL BE SECURELY ANCHORED IN PLACE BY TWO STAKES OR RE-BARS DRIVEN THROUGH EACH BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER. STAKES MUST BE LAID AT LEAST 18" INTO THE GROUND.

HAY BALE

DETAIL 2 / -

SCALE: N.T.S.



SECTION VIEW

NOTES:

1. ALL CONSTRUCTION DITCHES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. LIME TO PH OF 6.5. SWALE SHALL HAVE AT LEAST 4 INCHES OF TOPSOIL. SEED SHALL BE PLACED EARLY SPRING TO LATE AUGUST.
3. SEED MIXTURES:

3.1. MIXTURES	RATE/ACRE (LBS)	RATE/1,000 SQ.FT. (LBS)
WHITE CLOVER	10	0.25
PERENNIAL RYE GRASS	2	0.05
TOTAL	12	0.30
OR		
SMOOTH BROMEGRASS	15	0.35
PERENNIAL RYEGRASS	5	0.10
BIRD'S-FOOT TREFOIL WITH INOCULANT	10	0.25
TOTAL	30	0.79

4. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A STORM BASIN.
5. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
6. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH PROPER FUNCTIONING OF THE SWALE.
7. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
8. FILL SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
9. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF SWALE.
10. STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW:

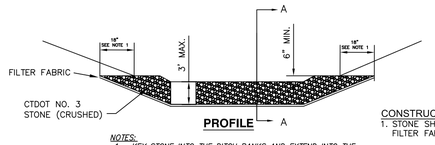
TYPE OF TREATMENT	CHANNEL GRADE	A (< 5 ACRES)	B (5 – 10 ACRES)
1	0.5–3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1 – 5.0%	SEED AND STRAW MULCH	SEED AND COVER WITH RECP, SOD OR LINE WITH PLASTIC OR 2 IN. STONE
3	5.1 – 8.0%	SEED AND COVER WITH RECP, SOD OR LINE WITH PLASTIC OR 2 IN. STONE	LINED WITH 4–8" RIP RAP OR GEOTEXTILE
4	8.1 – 10.0%	LINED WITH 4–8" RIP RAP OR GEOTEXTILE	SITE SPECIFIC DESIGN

12. INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAINFALL OF 0.5" OR GREATER

CONSTRUCTION DITCH

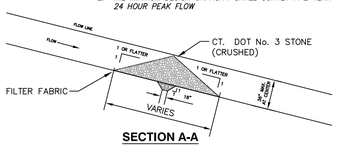
DETAIL 5 / -

SCALE: N.T.S.

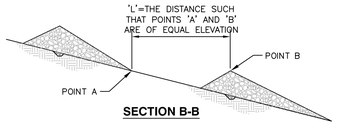


PROFILE

NOTES:
1. *KEY STONE INTO THE DITCH BANKS AND EXTEND INTO THE ABUTMENTS A MINIMUM OF 18" TO PREVENT FLOW FROM FLANKING THE CHECK DAM.*
2. *THE MINIMUM DESIGN CAPACITY SHALL CONVEY A 2 YEAR – 24 HOUR PEAK FLOW*



SECTION A-A



SECTION B-B

STONE CHECK DAM

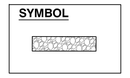
DETAIL 3 / -

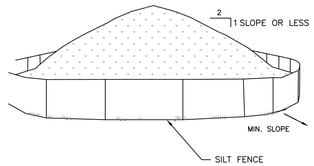
SCALE: N.T.S.

CONSTRUCTION SPECIFICATIONS:

1. STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATIONS OF THE DOWNSTREAM DAM ARE AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAM ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. CHECK DAMS SHOULD BE NO MORE THAN 20 FEET ABOVE SUCH APPURTENANCES, AND NO LESS THAN 6 FEET ABOVE CULVERT INLETS.
6. FOR TEMPORARY STONE CHECK DAMS, INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAINFALL OF 0.5" OR GREATER.

SYMBOL





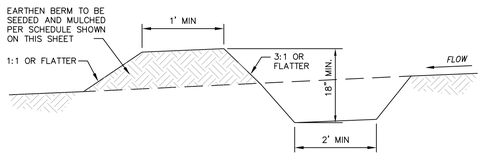
NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE. LOCATE STOCKPILE SO THAT NATURAL DRAINAGE IS NOT OBSTRUCTED.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING OR HAY BALE BARRIER APPROXIMATELY 10 FEET FROM THE PROPOSED TOE OF THE SLOPE.
4. STOCKPILES NOT TO BE USED WITHIN 30 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY.
5. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.
6. STOCKPILE HEIGHT SHOULD GENERALLY NOT EXCEED 20 FEET.

TEMPORARY SOIL STOCKPILE

DETAIL 4 / -

SCALE: N.T.S.



NOTES:

1. ALL PERIMETER DIKE/SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A STORM BASIN.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSION VELOCITY.
4. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN.
5. STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SEED AND STRAW MULCHING, AND SHALL BE DONE WITHIN 7 CALENDAR DAYS.
6. WEEKLY AND REQUIRED MAINTENANCE MUST BE PROVIDED. INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAINFALL OF 0.5" OR GREATER

DIVERSION DIKE

DETAIL 6 / -

SCALE: N.T.S.

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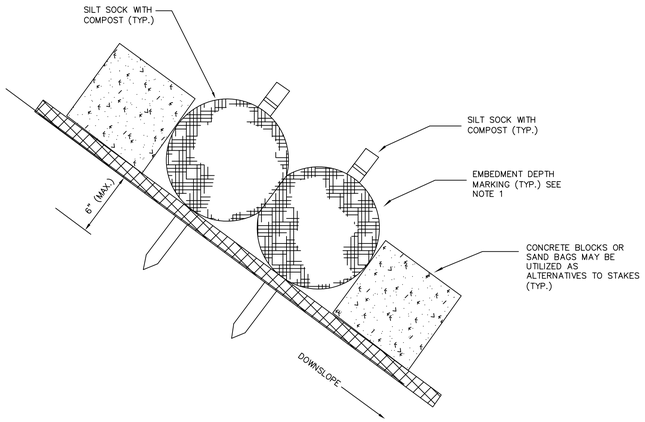
MARK	DATE	DESCRIPTION	BY
A	01/05/18	ISSUED FOR PERMITTING AND REVIEW	JS

WALLINGFORD RENEWABLE ENERGY
NEW HAVEN COUNTY, WALLINGFORD, CONNECTICUT

EROSION AND SEDIMENT CONTROL DETAILS

Project No.:	194-9002
Designed By:	KMT
Drawn By:	DS
Checked By:	RH

C-111



NOTES:

1. SILT SOCKS SHALL BE STAKED ON THE LANDFILL PROVIDED THE STAKES DO NOT EXCEED 6" INTO THE VEGETATIVE SUPPORT LAYER. STAKES SHALL BE CLEARLY MARKED 19" FROM THE TIP OF THE STAKE (6" MAX. EMBEDMENT DEPTH + 12" SOCK) AND SHALL BE CLEARLY VISIBLE.

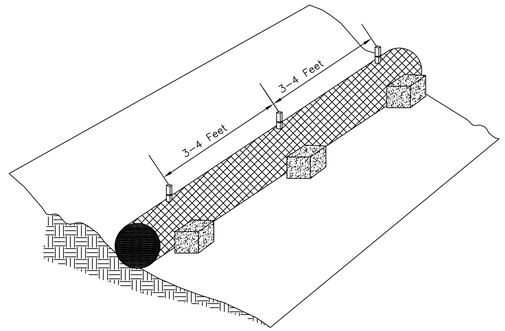
SILT SOCK STAKE/BLOCK CROSS SECTION

DETAIL 1 / -

SCALE: N.T.S.

SYMBOL

—— S ——



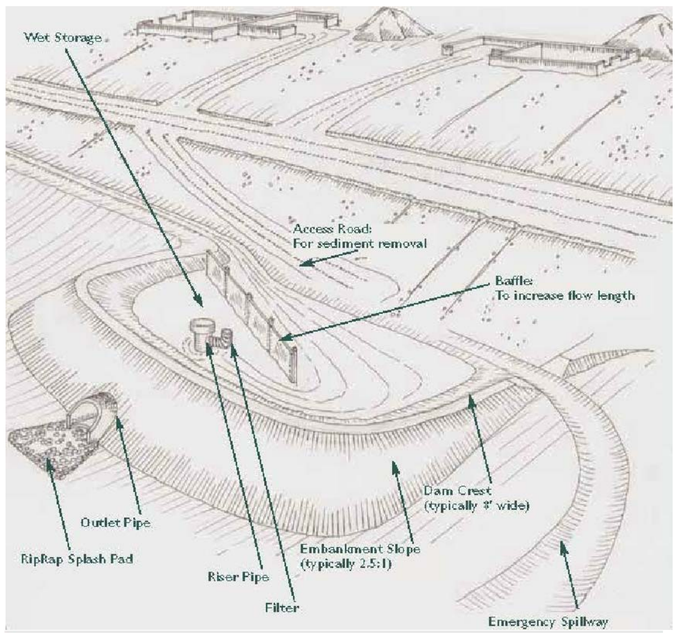
NOTES:

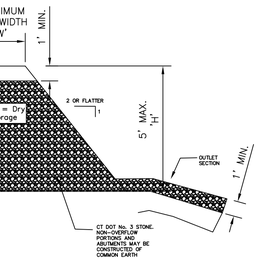
1. SILT SOCK TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.

SILT SOCK INSTALLATION DETAIL

DETAIL 2 / -

SCALE: N.T.S.





NOTES:

1. WEEKLY AND REQUIRED MAINTENANCE MUST BE PROVIDED. INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAINFALL OF 0.5" OR GREATER.
2. DETERMINE THE TOP WIDTH VS. HEIGHT (AS DISPLAYED IN THE DIAGRAM ABOVE) BY USING THE TABLE AT THE RIGHT.
3. FOR USE BELOW DISTURBED AREAS OF LESS THAN 5 ACRES AND LESS THAN 2 YEARS. TRAPS SHOULD BE CONSTRUCTED PRIOR TO GRADING ACTIVITIES.
4. CONTRACTOR SHOULD ATTEMPT, WHEN POSSIBLE, TO PROVIDE A WATER STORAGE AREA WITH A MINIMUM 2:1 LENGTH TO WIDTH RATIO (AS MEASURED FROM THE POINT OF MAXIMUM RUNOFF INTRODUCTION).
5. OUTLET FROM THE TRAP SHOULD BE CONSTRUCTED SO THAT THERE IS 1 FOOT OF FREE BOARD BETWEEN THE TOP OF THE OUTLET AND THE CREST OF THE EMBANKMENT. THE OUTLET CONSISTS OF A PERVIOUS STONE DIKE WITH A CORE OF MODIFIED RIP RAP, FACED ON THE UPSTREAM SIDE WITH CT DOT No. 3 STONE. THE TRAP MUST OUTLET ONTO STABILIZED GROUND, A WATERCOURSE, A STABILIZED CHANNEL, OR A STORM DRAIN.

TOP WIDTH VERSUS HEIGHT TABLE

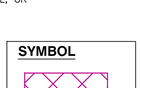
H (FT)	W (FT)
1.5 FT	2.0 FT
2.0 FT	2.0 FT
2.5 FT	2.5 FT
3.0 FT	2.5 FT
3.5 FT	3.0 FT
4.0 FT	3.0 FT
4.5 FT	4.0 FT
5.0 FT	4.5 FT

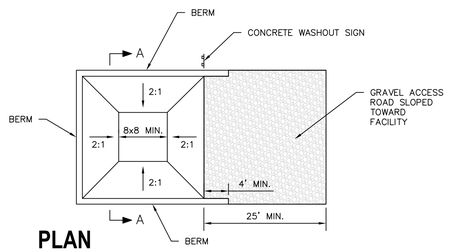
TEMPORARY SEDIMENT TRAP

DETAIL 3 / -

SCALE: N.T.S.

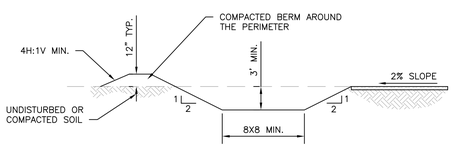
SYMBOL





PLAN

SCALE: N.T.S.



SECTION "A"

SCALE: N.T.S.

NOTES:

1. LOCATE THE FACILITY A MINIMUM OF 100 FEET FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS AND OTHER SURFACE WATER.
2. PREVENT SURFACE WATER FROM ENTERING THE STRUCTURE EXCEPT FOR THE ACCESS ROAD.
3. PROVIDE A GRAVEL ACCESS ROAD TO FACILITY THAT IS SLOPED DOWN TO FACILITY.
4. SIGNS SHALL BE PLACED TO DIRECT DRIVERS TO THE FACILITY AFTER THEIR LOAD IS DISCHARGED.
5. ALL WASHOUT FACILITIES SHALL BE LINED TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND. THE LINER SHALL BE PLASTIC SHEETING HAVING A MINIMUM THICKNESS OF 10 MILS WITH NO HOLES OR TEARS, AND ANCHORED BEYOND THE TOP OF THE PIT WITH AN EARTHEN BERM, SAND BAGS, STONE, OR OTHER STRUCTURAL APPURTENANCES EXCEPT AT THE ACCESS POINT.
6. PREFABRICATED WASHOUT FACILITIES CAN BE USED BUT THEY MUST CAPTURE AND CONTAIN CONCRETE WASH AND BE SIMILARLY SIZED AS SHOWN ABOVE AND LOCATED AS NOTED ABOVE.
7. WASH WATER IS ESTIMATED TO BE 7 GALLONS PER CHUTE AND 50 GALLONS PER HOPPER OF A PUMP TRUCK AND/OR DISCHARGING DRUM.

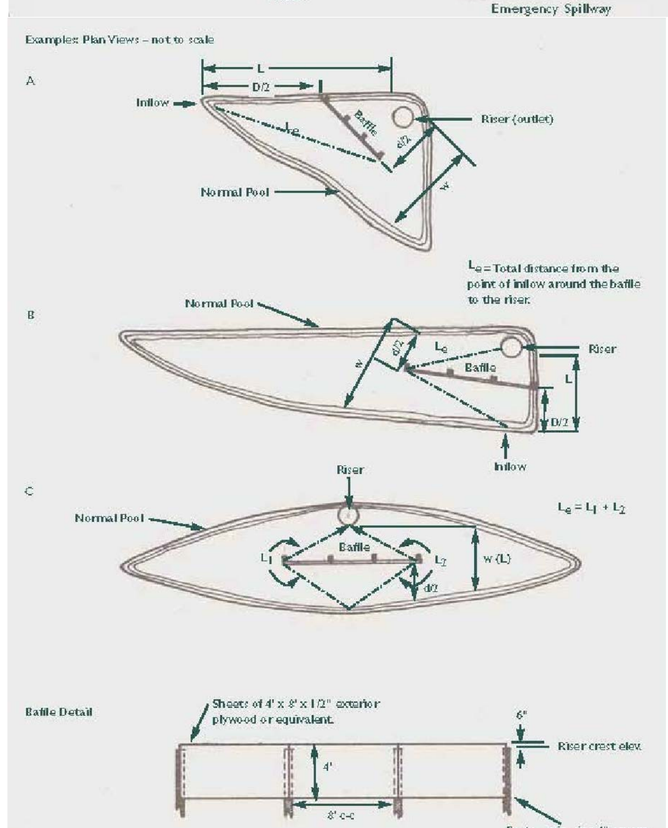
MAINTENANCE:

1. ALL FACILITIES MUST BE INSPECTED DAILY.
2. DAMAGED OR LEAKING FACILITIES SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
3. EXCESS ACCUMULATED RAINWATER OVER HARDENED CONCRETE SHALL BE PUMPED TO A STABILIZED AREA, SUCH AS A GRASS FILTER STRIP.
4. ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 50% OF THE STORAGE CAPACITY OF THE FACILITY IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY DISPOSED OF OFF-SITE AT A PERMITTED C&D LANDFILL. NO ONSITE DISPOSAL WILL BE ALLOWED.
5. THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE FACILITY.
6. INSPECT PROJECT SITE AT LEAST ONCE PER WEEK TO ENSURE THAT NO CONCRETE DISCHARGES ARE TAKING PLACE IN NON-DESIGNATED AREAS.

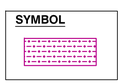
CONCRETE TRUCK WASHOUT AREA

DETAIL 4 / -

SCALE: N.T.S.



SYMBOL



TEMPORARY SEDIMENT BASIN DETAIL

DETAIL 5 / -

SCALE: N.T.S.

Table 1
Summary of Drainage Areas and Proposed Erosion and Sediment Control Features

Panel Area ID	Acreage	Erosion Control Measure(s)
A	4.39	Temp. Sediment Trap
BB	5.47	Temp. Sediment Basin
P	4.48	Temp. Sediment Trap
Q	2.90	Temp. Sediment Trap
S1	0.25	Haybales and/or silt fence
S2	0.11	Haybales and/or silt fence
S3	1.15	Stone Check Dam, Haybales
Y1	1.18	Stone Check Dam, Haybales
Y2	2.28	Temp. Sediment Trap
Z1	1.65	Stone Check Dam, Haybales
Z2	4.82	Temp. Sediment Trap
Z3	4.33	Temp. Sediment Trap
Z4	0.08	Haybales and/or silt fence
Z5	0.08	Haybales and/or silt fence
Z6	2.57	Temp. Sediment Trap

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PREPARED FOR:
Wallingford Renewable Energy LLC
909 Lake Carolyn Pkwy, Suite 260
Irving, Texas 75039

MARK	DATE	DESCRIPTION	BY
A	01/05/18	ISSUED FOR PERMITTING AND REVIEW	JS

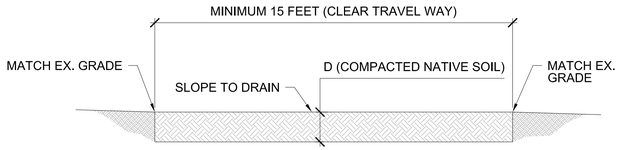
WALLINGFORD RENEWABLE ENERGY
NEW HAVEN COUNTY, WALLINGFORD, CONNECTICUT

EROSION AND SEDIMENT CONTROL DETAILS

Project No.:	194-9002
Designed By:	KMT
Drawn By:	DS
Checked By:	RH

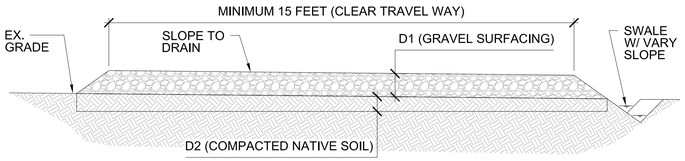
C-112

DETAIL NOTE:
1. SCARIFY AND RE-COMPACT NATIVE MATERIAL.
2. DEPTH T.B.D. BASED ON MATERIAL STRENGTH



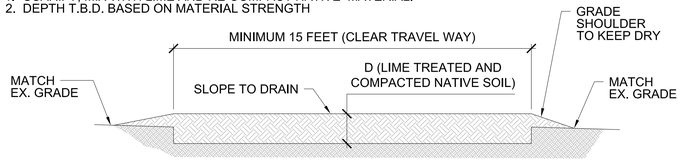
1 - LOW PLASTICITY SOIL ACCESS ROAD
SCALE: NTS

DETAIL NOTE:
1. SCARIFY AND RE-COMPACT NATIVE MATERIAL.
2. DEPTH T.B.D. BASED ON MATERIAL STRENGTH
3. SWALE TO BE DESIGNED BY A NEW YORK STATE PROFESSIONAL ENGINEER AND APPROVED PRIOR CONSTRUCTION OF ROAD.



2 - MODERATE SOIL ACCESS ROAD
SCALE: NTS

DETAIL NOTE:
1. SCARIFY, MIX WITH LIME AND RE-COMPACT NATIVE MATERIAL.
2. DEPTH T.B.D. BASED ON MATERIAL STRENGTH



3 - LIME TREATED ACCESS ROAD
SCALE: NTS

SOIL TYPES

TYPE I: MEDIUM DENSE TO DENSE COARSE MEDIUM GRANULAR SOIL WITHOUT PLASTICITY (CBR>10)

TYPE II: MEDIUM DENSE TO LOOSE GRANULAR SOIL OR STIFF COHESIVE SOIL. LOW PLASTICITY TO MEDIUM PLASTICITY (3<CBR≤10)

TYPE III: FIRM TO SOFT COHESIVE SOIL WITH HIGH PLASTICITY (CBR≤10)

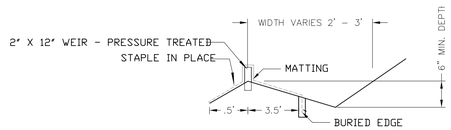
TYPE IV: BEDROCK

THICKNESS		
SOIL TYPE	EXPOSURE SUB GRADE TO SCARIFY	AGGREGATE SURFACE ROAD THICKNESS
TYPE I	0'-6"	0'-10 1/2"
TYPE II	0'-10"	1'-0"
TYPE III	1'-4" - (*)	1'-4 1/2"
TYPE IV	0'-6" (*)(*)	0'-10 1/2"

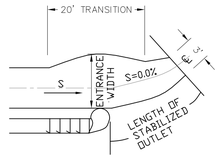
(*) THAT DEEP MUST BE REFILLED WITH COARSE-MEDIUM GRAVEL OR CRUSHED MATERIAL
(*) (*) REMOVE ROCK TO A POINT 6" BELOW SUBBASE LEVEL FOR ENTIRE ROADWAY REGULARIZE THE CUT BOTTOM

NOTES:

1. DETAILS SHOWN ARE CONCEPTUAL ONLY. FINAL LOCATION AND DIMENSIONS OF ROADS AND ASSOCIATED ITEMS SHALL BE DESIGNED BY A CONNECTICUT STATE PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION AND BE IN ACCORDANCE WITH ALL LOCAL AND STATE STANDARDS.



SECTION



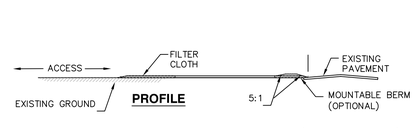
PLAN VIEW

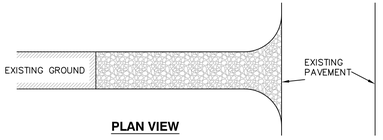
DESIGN FLOW, Q_{10} (CFS)	DEPTH (FT)	WIDTH OF LOWER SIDE SLOPE OF SPREADER (FT)	LENGTH (FT)
0-10	0.5	6	10
10-20	0.6	6	20

CONSTRUCTION SPECIFICATIONS

1. THE MATTING SHOULD BE A MINIMUM OF 4 FEET WIDE EXTENDING 6 INCHES OVER THE LIP AND BURIED 6 INCHES DEEP IN A VERTICAL TRENCH ON THE LOWER EDGE. THE UPPER EDGE SHOULD BUTT AGAINST SMOOTHLY CUT SOD AND BE SECURELY HELD IN PLACE WITH CLOSELY SPACED HEAVY DUTY WIRE STAPLES AT LEAST 12 INCHES IN LENGTH.
2. ENSURE THAT THE LIP IS LEVEL TO UNIFORMLY SPREAD DISCHARGE.
3. THE LIP SHALL BE CONSTRUCTED ON UNDISTURBED SOIL NOT FILL.
4. A 20 FOOT TRANSITION SECTION WILL BE CONSTRUCTED FROM THE DIVERSION CHANNEL TO THE SPREADER TO SMOOTHLY BLEND THE DIFFERENT DIMENSION AND GRADES.
5. THE RUNOFF DISCHARGE SHALL OUTLET ONTO A STABILIZED VEGETATED SLOPE NOT EXCEEDING 5%.
6. SEED AND MULCH THE DISTURBED AREA IMMEDIATELY AFTER CONSTRUCTION.

4 - LEVEL SPREADER DETAIL
SCALE: NTS





PLAN VIEW

CONSTRUCTION ENTRANCE SPECIFICATIONS:
1. STONE SIZE – CTDOT NO. 3 OR ASTM C-33 NO. 2 OR ASTM C-33 NO. 3.
2. THICKNESS – NOT LESS THAN SIX (6) INCHES.
3. WIDTH – SIXTEEN (16) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
4. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50', WHERE SOILS SUBJECT TO TRACKING CONTAIN LESS THAN 80% SAND, MINIMUM LENGTH SHALL BE 100'.
5. GEOTEXTILE – FIBERS USED IN GEOTEXTILES SHALL CONSIST OF SYNTHETIC POLYMERS COMPOSED OF AT LEAST 85% BY WEIGH POLYPROPYLENES, POLYESTERS, POLYAMIDES, POLYETHYENE, POLYOLEFINS OR POLYVINYLIDENE-CHLORIDES AND SHALL BE SPECIFICALLY INTENDED FOR ROAD STABILIZATION APPLICATIONS.
6. LOCATION – AVOID INSTALLING CONSTRUCTION ENTRANCE ON ORGANIC OR POORLY DRAINED SOILS.
7. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL A BERM WITH 5:1 SLOPES WILL BE PERMITTED. IF THE GRADE OF THE CONSTRUCTION ENTRANCE EXCEEDS 2% AND IT DRAINS TO THE PAVED SURFACE, CONSTRUCT A WATER BAR AT LEAST 15FT FROM THE ENTRANCE TO DIVERT RUNOFF WATER TO A SETTLING OR FILTERING AREA.
8. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
9. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE THAT CAN HOLD AT LEAST 2 HOURS USAGE WORTH OF WATER.
10. WEEKLY INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED.

SYMBOL

5 - CONSTRUCTION ENTRANCE DETAIL
SCALE: NTS

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Irving, Texas 75039

MARK	DATE	DESCRIPTION	BY
A	01/05/18	ISSUED FOR PERMITTING AND REVIEW	JS

WALLINGFORD RENEWABLE ENERGY
NEW HAVEN COUNTY, WALLINGFORD, CONNECTICUT

CIVIL CONSTRUCTIONS DETAILS

Project No.:	194-9002
Designed By:	JS, KMT
Drawn By:	FGM, DS
Checked By:	JS

C-116

CAD FILE: 9002-WRE_C116-REV A.DWG

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EARTHWORK

PRODUCTS:

SOIL MATERIALS: PROVIDE BORROW SOIL MATERIALS WHEN SUFFICIENT SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE FROM EXCAVATIONS. SATISFACTORY SOILS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM, OR A COMBINATION OF THESE GROUP SYMBOLS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER. UNSATISFACTORY SOILS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GC, SC, ML, MH, CL, CH, OL, OH, AND PT, OR A COMBINATION OF THESE GROUP SYMBOLS.

STRUCTURAL FILL: SATISFACTORY SOIL MATERIALS.

UNCLASSIFIED FILL: SATISFACTORY SOIL MATERIALS.

BACKFILL AND FILL: SATISFACTORY SOIL MATERIALS.

SUBBASE MATERIAL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT LEAST 90 PERCENT PASSING A 1-1/2-INCH SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE.

BEDDING: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; EXCEPT WITH 100 PERCENT PASSING A 1-INCH SIEVE AND NOT MORE THAN 8 PERCENT PASSING A NO. 200 SIEVE.

PEA-GRAVEL: 1/4-INCH CLEAN WASHED GRAVEL (PEA-GRAVEL) WITH LESS THAN 10% FINES (PASSING #200 SIEVE)

COARSE SAND: NATURALLY OR ARTIFICIALLY GRADED IN MIXTURE OF NATURAL OR CRUSHED SAND WITH A MINIMUM PERMEABILITY OF 0.3 CM/SEC AND LESS THAN 5% BY WEIGHT PASSING THE NO. 200 SIEVE.

GEOTEXTILE: PRODUCTS AS NOTES ON THE DETAILS

INSTALLATION:

PREPARATION: PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTHWORK OPERATIONS.

EXCAVATE FOR STRUCTURES, PAVEMENTS, AND WALKS TO INDICATED ELEVATIONS AND DIMENSIONS. EXTEND EXCAVATIONS FOR PLACING AND REMOVING CONCRETE FORMWORK, FOR INSTALLING SERVICES AND OTHER CONSTRUCTION, AND FOR INSPECTIONS. TRIM BOTTOMS TO REQUIRED LINES AND GRADES TO LEAVE SOLID BASE TO RECEIVE OTHER WORK.

EXCAVATE UTILITY TRENCHES TO INDICATED GRADIENTS, LINES, DEPTHS, AND INVERT ELEVATIONS OF UNIFORM WIDTHS TO PROVIDE A WORKING CLEARANCE ON EACH SIDE OF PIPE OR CONDUIT. EXCAVATE TRENCH WALLS VERTICALLY FROM TRENCH BOTTOM TO 12 INCHES HIGHER THAN TOP OF PIPE OR CONDUIT. EXCAVATE TRENCHES DEEPER THAN BOTTOM OF PIPE ELEVATION, 6 INCHES DEEPER IN ROCK, 4 INCHES DEEPER ELSEWHERE, TO ALLOW FOR BEDDING COURSE. HAND EXCAVATE FOR BELL OF PIPE. TRENCH WALLS SHALL BE SHORED OR SLOPED IN ACCORDANCE WITH OSHA REGULATIONS.

PROOF ROLL SUBGRADES, BEFORE FILLING OR PLACING AGGREGATE COURSES, WITH HEAVY PNEUMATIC-TIRED EQUIPMENT TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF ROLL WET OR SATURATED SUBGRADES. ALL TOPSOIL AND/OR ORGANIC MATERIAL SHALL BE REMOVED FROM AREAS TO RECEIVE FILL.

RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES. BACKFILL AND FILL SHALL NOT BE PLACED ON FROZEN MATERIAL.

FILL UNAUTHORIZED EXCAVATION UNDER FOUNDATIONS OR WALL FOOTINGS BY EXTENDING BOTTOM ELEVATION OF CONCRETE FOUNDATION OR FOOTING TO EXCAVATION BOTTOM, WITHOUT ALTERING TOP ELEVATION. LEAN CONCRETE FILL MAY BE USED WHEN APPROVED BY ENGINEER. FILL UNAUTHORIZED EXCAVATIONS UNDER OTHER CONSTRUCTION OR UTILITY PIPE AS DIRECTED BY ARCHITECT.

UTILITY TRENCH BACKFILL: PLACE, COMPACT, AND SHAPE BEDDING COURSE TO PROVIDE CONTINUOUS SUPPORT FOR PIPES AND CONDUITS OVER ROCK AND OTHER UNYIELDING BEARING SURFACES AND TO FILL UNAUTHORIZED EXCAVATIONS.

PLACE AND COMPACT INITIAL BACKFILL OF SATISFACTORY SOIL MATERIAL OR SUBBASE MATERIAL, FREE OF PARTICLES LARGER THAN 1.5 INCH, TO A HEIGHT OF 12 INCHES OVER THE UTILITY PIPE OR CONDUIT. PLACE AND COMPACT FINAL BACKFILL OF SATISFACTORY SOIL MATERIAL TO FINAL SUBGRADE.

FILL: PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS.

COMPACTION: PLACE BACKFILL, STRUCTURAL FILL AND UNCLASSIFIED FILL MATERIALS IN LAYERS NOT MORE THAN 12 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGE OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698: BACKFILL: EACH LAYER SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY.

STANDARD FILL: SCARIFY AND RECOMPACT THE TOP 12 INCHES OF EXISTING SUBGRADE AND EACH LAYER OF FILL MATERIAL AT 95% MAXIMUM DRY DENSITY.

UNCLASSIFIED FILL: SCARIFY AND RECOMPACT THE TOP 12 INCHES OF EXISTING SUBGRADE AND EACH LAYER OF FILL MATERIAL AT 90% MAXIMUM DRY DENSITY.

GRADING: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE FROM IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. GRADE LAWNS, WALKS, AND UNPAVED SUBGRADES TO TOLERANCES OF PLUS OR MINUS 1 INCH AND PAVEMENTS AND AREAS WITHIN BUILDING LINES TO PLUS OR MINUS 1/2 INCH.

SUBBASE AND BASE COURSES: UNDER PAVEMENTS AND WALKS, PLACE SUBBASE COURSE ON PREPARED SUBGRADE. PLACE BASE COURSE MATERIAL OVER SUBBASE. COMPACT TO REQUIRED GRADES, LINES, CROSS SECTIONS, AND THICKNESS TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698.

GEOTEXTILE: SEE PLANS / DETAILS FOR SPECIFIC PRODUCT REQUIREMENTS.

SITE CONCRETE:

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIALS, PERMITS, AND RELATED MISCELLANEOUS WORK NECESSARY TO COMPLETE THE WORK AS SPECIFIED HEREIN OR AS SHOWN ON THE DRAWINGS. THE CONCRETE WORK UNDER THIS SPECIFICATION SHALL INCLUDE ALL CLEARING AND GRUBBING, PREPARATION OF SUBGRADE, FURNISHING AND PLACING CONCRETE, SHOULDERING, AND CONSTRUCTION OF FILLS AND EMBANKMENTS, UNLESS SUCH ITEMS APPEAR OF THE PROPOSAL TO BE BID SEPARATELY. IT IS THE INTENT OF THESE SPECIFICATIONS THAT A SUB-GRADE OF UNIFORM STABILITY BE OBTAINED BY A SUITABLE CONSTRUCTION METHOD FOR PLACEMENT OF CONCRETE.

PRODUCTS:

WATER: WATER FOR CONCRETE CONSTRUCTION SHALL BE CLEAN AND FREE OF OIL, ACIDS, SALTS, OR OTHER DELETERIOUS MATERIALS.

PORTLAND CEMENT: PORTLAND CEMENT SHALL CONFORM TO ASTM STANDARD SPECIFICATIONS C 150 TYPE I OR TYPE1A LATEST EDITION. HIGH-EARLY STRENGTH PORTLAND SHALL CONFORM TO ASTM STANDARD SPECIFICATION S C 150 TYPE III OR TYPE IIIA. ALL CEMENT POURED UNDER EXTREME HEAT CONDITIONS SHALL USE ASTM STANDARD SPECIFICATIONS C-150 TYPE II.

CONCRETE: UNLESS OTHERWISE NOTES THE CONCRETE MIX SHALL BE CAPABLE OF ACHIEVING A 28-DAY STRENGTH OF 4000 PSI AT 28 DAYS. MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. **AIR-ENTRAINED CONCRETE ONLY. THE AIR CONTENT OF THE CONCRETE SHALL BE 6% PLUS OR MINUS 1% BY VOLUME BASED ON MEASUREMENTS MADE ON CONCRETE IMMEDIATELY AFTER DISCHARGE FROM THE MIXER IN ACCORDANCE WITH ASTM, C-138, C-173 OR C-231.

REINFORCING STEEL: SEE STRUCTURAL PLANS AND DETAILS.
JOINT SEALING MATERIALS: FOR SLABS OR PAVEMENTS EXPOSED TO THE WEATHER, ASPHALT FILLER SHALL BE USED CONFORMING TO THE LATEST REVISION OF AASHTO SPECIFICATION M-18 TYPE A AN APPROVED MASTER FILLER.

INSTALLATION:

BEFORE BEGINNING A RUN OF CONCRETE, ALL WATER SHALL BE REMOVED FROM ALL TRENCHES AND FOUNDATIONS, ALL EQUIPMENT AND FORMS SHALL BE CLEANED AND OILED, AND REINFORCEMENT SHALL BE CLEANED OF ICE OR OTHER FOREIGN COATINGS. CONCRETE SHALL NOT BE PLACED UNTIL ALL REINFORCEMENT IS SECURELY AND PROPERLY FASTENED IN ITS CORRECT POSITION, NO UNTIL ALL SLEEVES, HANGERS, PIPES, CONDUCTS, BOLTS, OR ANY OTHER FIXTURE REQUIRED TO BE EMBEDDED THEREIN HAS BEEN PLACED AND ANCHORED BY THE CONTRACTOR. CONCRETE SHALL NOT BE PLACED UNTIL THE FORMS HAVE BEEN INSPECTED AND APPROVED BY THE ENGINEER, AND PLACED UNDER THE DIRECT SUPERVISION OF THE ENGINEER.

CONCRETE SHALL BE HANDLED FROM THE MIXER TO FORMS AS RAPIDLY AS POSSIBLE BY METHODS, WHICH SHALL PREVENT ANY SEPARATION OR LOSS OF INGREDIENTS WHILE TRANSPORTING THE CONCRETE. CONCRETE SHALL BE HANDLED FROM THE MIXER IN CARTS, BUGGIES, OR CONVEYORS AND SHALL NOT BE DELIVERED BY SPOUT OR TROUGH OR DUMPED WITH A FREE FALL OF MORE THAN 5 FEET. RUNWAY SUPPORTS FOR BUGGIES OR DELIVERY CARTS SHALL NOT BEAR UPON REINFORCING STEEL OR FRESH CONCRETE.

PLACING CONCRETE BEFORE INITIAL SET HAS OCCURRED, AND IN NO EVENT AFTER IT HAS CONTAINED ITS WATER CONTENT FOR MORE THAN ONE HOUR. PLACE ALL CONCRETE ON CLEAN, DAMP SURFACES, FREE FROM WATER, OR UPON PROPERLY CONSOLIDATED FILLS, BUT NEVER UPON SOFT MUD, DRY POROUS EARTH, OR FROZEN GROUND. DEPOSIT CONCRETE CONTINUOUSLY AND AS RAPIDLY AS PRACTICAL UNTIL THE UNIT OF OPERATION IS COMPLETED. CONSOLIDATE ALL CONCRETE BY VIBRATION SO THAT THE CONCRETE IS THOROUGHLY WORKED AROUND THE REINFORCEMENT, AROUND IMBEDDED ITEMS, AND INTO CORNERS OF FORMS, ELIMINATING ALL AIR OR STONE POCKETS WHICH MAY CAUSE HONEY-COMBING, PITTING, OR PLANES OF WEAKNESS.

THE PLACING OF CONCRETE SHALL BE CARRIED ON CONTINUOUSLY BETWEEN CONSTRUCTION JOINTS SHOWN ON THE DRAWINGS.

PROVIDE ADEQUATE PROTECTION AGAINST RAIN, SLEET, AND SNOW BEFORE AND DURING PLACEMENT AND FINISHING OF CONCRETE. PROVIDE ADEQUATE PROTECTIVE MEASURES TO MAINTAIN THE TEMPERATURE OF THE CONCRETE AS SPECIFIED. CURING SHALL BE IN ACCORDANCE WITH ACI 318.

DO NOT PLACE CONCRETE WHEN THE ATMOSPHERIC TEMPERATURE IS BELOW 40 DEGREES F., OR WHEN THE CONCRETE IS LIKELY TO BE SUBJECTED TO FREEZING TEMPERATURES WITHIN 24 HOURS AFTER IT HAS BEEN DEPOSITED UNLESS ADEQUATE TEMPORARY HEATING HAS BEEN PROVIDED. MAINTAIN THE CONCRETE AT A TEMPERATURE NOT LOWER THAN 70 DEGREES F. FOR 3 DAYS OR 50 DEGREES F. FOR 5 DAYS AFTER PLACING, EXCEPT WHEN HIGH-EARLY-STRENGTH CEMENT OR CONCRETE IS USED, THE TEMPERATURE MUST BE MAINTAINED AT NOT LESS THAN 70 DEGREES F. FOR 2 DAYS OR 50 DEGREES F. FOR 3 DAYS. THE METHODS OF HEATING THE MATERIALS AND PROTECTING THE CONCRETE SHALL BE APPROVED BY THE ENGINEER. SALT, CHEMICALS, OR OTHER FOREIGN MATERIALS SHALL NOT BE MIXED WITH THE CONCRETE FOR THE PURPOSE OF PREVENTING FREEZING. FORMS SHALL BE ENCLOSED AND HEATED AT 50 DEGREES F. TO 70 DEGREES F. FOR 2 DAYS BEFORE THE POUR IS MADE.

EXCEPT AS OTHERWISE SPECIFIED, ALL FORMED SURFACES SHALL HAVE AN ORDINARY SURFACE FINISH. THE SURFACES OF ALL CONCRETE MASONRY SHALL BE THOROUGHLY WORKED DURING THE PLACING OF THE CONCRETE. AFTER THE FORMS ARE REMOVED AND POINTING COMPLETED AND AFTER THE CONCRETE HAS HARDENED, ALL FINS AND IRREGULARITIES SHALL BE REMOVED WITH A CARBORUNDUM BRICK. SHOULD DEFECTS APPEAR IN THE FINAL SURFACE SUCH THAT, IN THE JUDGEMENT OF THE ENGINEER, A SATISFACTORY SURFACE HAS NOT BEEN SECURED, THE ENGINEER MAY ORDER THE CONTRACTOR TO RUB FINISH THE SURFACE OF SUCH SECTIONS AS IS NECESSARY TO PRODUCE A FINISHED AND WORKMANLIKE JOB.

IN SLABS, PLATFORMS, OR OTHER EXPOSED SLABS WHERE LONGITUDINAL, TRANSVERSE OR SAWED JOINTS ARE CALLED FOR, THEY SHALL BE PLACED AS SHOWN ON THE PLANS AND CONSTRUCTED AS NOTES ON THE DETAILS.

ANY CONCRETE WORK NOT FORMED AS SHOWN ON THE PLANS OR FOR ANY REASON IS OUT OF ALIGNMENT OR LEVEL OR SHOWS A DEFECTIVE SURFACE SHALL BE CONSIDERED AS NOT CONFORMING WITH THE INTENT OF THESE SPECIFICATIONS AND SHALL BE REMOVED FROM THE JOB BY THE CONTRACTOR AT HIS EXPENSE UNLESS THE ENGINEER GRANTS PERMISSION TO PATCH THE DEFECTIVE AREA.

STEEL REINFORCEMENT:
GENERAL: ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM NEW BILLET STEEL, INTERMEDIATE GRADE, DEFORMED BARS, IN ACCORD WITH STANDARD SPECIFICATIONS ASTM A 15 LATEST EDITION. STEEL REINFORCEMENT SHALL CONSIST OF FURNISHING AND PLACING BAR STEEL OR STEEL FABRIC REINFORCEMENTS AS SHOWN ON THE PLANS AND REQUIRED BY THE CONTRACT.

SHEETS OF MESH OR BAR STEEL REINFORCEMENT SHALL OVERLAP EACH OTHER SUFFICIENTLY TO MAINTAIN A UNIFORM STRENGTH AND SHALL BE SECURELY FASTENED AT THE ENDS AND EDGES. THE EDGE LAP SHALL NOT BE LESS THAN ONE MESH IN WIDTH.

PLACING AND FASTENING. STEEL REINFORCEMENT SHALL BE ACCURATELY PLACED IN THE POSITIONS SHOWN ON THE PLANS AND FIRMLY HELD DURING THE PLACING AND SETTING OF CONCRETE BY MEANS OF SPACER STRIPS, STAYS, METAL CHAIRS, OR OTHER APPROVED DEVICES OR SUPPORTS. BARS SHALL BE SECURELY TIED AT ALL INTERSECTIONS EXCEPT WHERE SPACING IS LESS THAN 1 FOOT IN EACH DIRECTION, WHEN ALTERNATE INTERSECTIONS SHALL BE TIED. THE PLACING AND SECURING OF THE REINFORCEMENT IN ANY UNIT OR SECTION SHALL BE APPROVED BY THE ENGINEER BEFORE ANY CONCRETE IS PLACED IN ANY SUCH UNIT OR SECTION.

REINFORCEMENT IN SLABS PLACED ON EARTH THE REINFORCING SHALL BE SUPPORTED BY MASONRY BLOCKING OF PROPER HEIGHT TO INSURE THAT THE REINFORCING MATERIAL WILL BE PLACED IN THE CENTER OF SUCH SLABS. IN ALL OTHER FLOOR SLABS, THE REINFORCING SHALL BE SPACED AS SHOWN ON THE PLANS. WHERE WIRE MESH IS USED IN FLOOR SLABS, IT SHALL BE 6" BY 6" / #6 X #6 GAUGE WELDED WIRE. ALL MESH SHALL BE LAPPED A MINIMUM OF 6 INCHES.

TESTING:
THREE COMPRESSION TEST CYLINDERS FROM EACH FLOOR, SLAB, WALL, AND FOOTING SHALL BE MADE UNDER THE SUPERVISION OF THE ENGINEER, AND ONE OF EACH PAIR SHALL BE CRUSHED AT 7 DAYS AND THE OTHER AT 28 DAYS. THE THIRD SHALL BE HELD IN RESERVE. THIS WORK SHALL BE DONE AT A LABORATORY APPROVED BY THE ENGINEER AND REPORTS SENT TO THE ENGINEER. ALL WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

SHOP DRAWINGS SHALL BE SUBMITTED OF ALL REINFORCING USED SHOWING THEIR DIMENSIONS, BENDING DETAILS, STIRRUP DETAILS, AND ALL OTHER DETAILS.

PIPING

PRODUCTS:

FOR STORM SEWER DRAINAGE, HIGH-DENSITY POLYETHYLENE PIPE (HDPE) SHALL BE ADS N-12 PIPE OR EQUIVALENT. PIPES AND JOINTS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.

PRECAST CONCRETE CATCH BASIN: KISTNER PRECAST CONCRETE CATCH BASIN, SHALL COMPLY WITH ASTM C478 AND CONSIST OF PRECAST, REINFORCED CONCRETE, OF DEPTH INDICATED, WITH PROVISION FOR O-RING AND GASKET MATERIAL FOR JOINTS. RISER SECTIONS LENGTHS TO PROVIDE DEPTH INDICATED, WITH SINGLE POUR MONOLITHIC BASE SECTION.

CATCH BASIN FRAME AND GRATE: ASTM A536, GRADE 60-40-18, DUCTILE IRON DESIGNED FOR HEAVY DUTY SERVICE. THE GRATES AND FRAMES SHALL MAKE FIRM, FULL AND EVEN BEARING ON THEIR RESPECTIVE UNDERLYING SURFACES AND SHALL BE NON-ROCKING UNDER THE INFLUENCE OF TRAFFIC OR OTHER LOADS.

INSTALLATION:

PROTECTIVE COATINGS: ONE- OR TWO-COAT, COAL-TAR EPOXY; 15-MIL MINIMUM THICKNESS, UNLESS OTHERWISE INDICATED; FACTORY OR FIELD APPLIED ON ALL MANHOLES, FRAMES, GRATES, AND CATCH BASIN SURFACES.

ARRANGE FOR INSTALLING GREEN WARNING TAPES DIRECTLY OVER PIPING AND AT OUTSIDE EDGES OF UNDERGROUND STRUCTURES. USE WARNING TAPE OR DETECTABLE WARNING TAPE OVER FERROUS PIPING. USE DETECTABLE WARNING TAPE OVER NONFERROUS PIPING AND OVER EDGES OF UNDERGROUND STRUCTURES.

PIPING APPLICATIONS:
FOR SANITARY SEWERS, INCLUDE WATERTIGHT BALL AND SPIGOT JOINTS WITH ELASTOMERIC FIXED IN PLACE GASKETS.

SLEEVE-TYPE PIPE COUPLINGS: USE WHERE REQUIRED TO JOIN PIPING AND NO OTHER APPROPRIATE METHOD IS SPECIFIED. DO NOT USE INSTEAD OF SPECIFIED JOINING METHODS.

GENERAL LOCATIONS AND ARRANGEMENTS: DRAWING PLANS AND DETAILS INDICATE GENERAL LOCATION AND ARRANGEMENT OF UNDERGROUND STORM DRAINAGE AND UNDERGROUND SANITARY SEWER PIPING. LOCATION AND ARRANGEMENT OF PIPING LAYOUT TAKE DESIGN CONSIDERATIONS INTO ACCOUNT. INSTALL PIPING AS INDICATED, TO EXTENT PRACTICAL.

INSTALL PIPING AS SHOWN ON DRAWINGS, VERIFYING GRADES AND FLOW LINES. INSTALL PIPING TRUE TO GRADES AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. PLACE BELL ENDS OF PIPING FACING UPSTREAM. INSTALL GASKETS, SEALS, SLEEVES, AND COUPLINGS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR USE OF LUBRICANTS, CEMENTS, AND OTHER INSTALLATION REQUIREMENTS. MAINTAIN SWAB OR DRAG IN LINE, AND PULL PAST EACH JOINT AS IT IS COMPLETED.

PIPE JOINT CONSTRUCTION AND INSTALLATION: JOIN AND INSTALL PIPE AND FITTINGS ACCORDING TO INSTALLATIONS INDICATED.

HDPE PIPE AND FITTINGS: JOIN PIPE, TUBING, AND FITTINGS WITH COUPLINGS FOR SOILTIGHT JOINTS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. INSTALL ACCORDING TO ASTM D 2321 AND MANUFACTURER'S WRITTEN INSTRUCTIONS. INSTALL CORRUGATED PIPING ACCORDING TO THE CORRUGATED POLYETHYLENE PIPE ASSOCIATION'S "RECOMMENDED INSTALLATION PRACTICES FOR CORRUGATED POLYETHYLENE PIPE AND FITTINGS." JOIN PIPING MADE OF DIFFERENT MATERIALS OR DIMENSIONS WITH COUPLINGS MADE FOR THIS APPLICATION. USE COUPLINGS THAT ARE COMPATIBLE WITH AND THAT FIT BOTH SYSTEMS' MATERIALS AND DIMENSIONS.

PVC FITTINGS SHALL BE OF THE SAME MANUFACTURE AND SHALL HAVE COMPATIBLE JOINTS AND SHALL MEET ASTM D3034 & D2241 AS APPROPRIATE.

CATCH BASIN AND MANHOLE INSTALLATION: INSTALL COMPLETE WITH APPURTENANCE AND ACCESSORIES INDICATED. SET TOPS OF FRAMES AND COVERS FLUSH WITH FINISHED GEADE INSTALL PRECAST CATCH BASIN SECTION WITH GASKETS ACCORDING TO ASTM C891.

GRATE INSTALLATION: SET FRAMES AND GRATES TO BE FLUSH WITH FINISHED GRADE.

MAKE CONNECTIONS TO EXISTING PIPING AND UNDERGROUND STRUCTURES SO FINISHED WORK COMPLIES AS NEARLY AS PRACTICAL WITH REQUIREMENTS SPECIFIED FOR NEW WORK.

EROSION AND SEDIMENT CONTROL MEASURES:

GENERAL MEASURES:
1. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
2. AS MUCH AS IS PRACTICAL, EXISTING VEGETATION SHALL BE PRESERVED. FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SOILS.
3. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
4. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE.

PARTICULAR MEASURES

1. STABILIZED CONSTRUCTION ENTRANCE, UTILIZED DURING CONSTRUCTION, SHALL BE MAINTAINED IN A CONDITION THAT SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY. WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PERIODIC INSPECTIONS AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
2. CHECK DAMS: UNTIL SUCH TIME AS FINAL SITE STABILIZATION IS COMPLETED, DITCHES SHALL RECEIVE TREATMENT WITH CHECK DAMS SO AS TO EFFECTIVELY TRAP SEDIMENT AND MINIMIZE ITS RELEASE OFF-SITE. CHECK DAMS SHALL BE CONSTRUCTED WITHIN EACH DITCH BEGINNING AT ITS DOWNSTREAM TERMINUS AND SHOULD BE PLACED AT INTERVALS INDICATED ON THE DRAWINGS.
3. SOIL STOCKPILES: SILT FENCES SHALL BE CONSTRUCTED AROUND ALL STOCKPILES OF FILL, TOPSOIL, AND EXCAVATED OVERBURDEN THAT ARE TO REMAIN EXPOSED FOR PERIODS LESS THAN 7 DAYS. SILT FENCES SHALL BE ANCHORED AND MAINTAINED IN GOOD CONDITION UNTIL SUCH TIME AS SAID STOCKPILES ARE REMOVED AND STOCKPILING AREAS ARE BROUGHT TO FINAL GRADE AND PERMANENTLY STABILIZED. TOPSOIL AND FILL THAT IS TO REMAIN STOCKPILED ON-SITE FOR PERIODS GREATER THAN 7 DAYS SHALL BE STABILIZED BY SEEDING. PRIOR TO THE SEEDING OPERATION, THE STOCKPILED MATERIAL SHALL BE GRADED AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. IN NO CASE SHALL ERODIBLE MATERIALS BE STOCKPILED WITHIN 25 FEET OF ANY DITCH, STREAM, OR OTHER SURFACE WATER BODY. STOCKPILES WHICH ARE NOT INTENDED FOR USE WITHIN 30 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY.
4. DUST CONTROL: NO POLYMER APPLICATION SHALL TAKE PLACE WITHOUT WRITTEN APPROVAL FROM THE NYSDEC. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED TO MINIMIZE THE AMOUNT OF AREA DISTURBED AT ONE TIME. APPLY MULCH, VEGETATION OR SPRAY WATER OR ADDITIVES TO AREAS WHERE LAND DISTURBANCE HAS OCCURRED TO PREVENT SURFACE AND AIR MOVEMENT OF DUST.

EXECUTION:

1. ANY DISTURBED AREAS INCLUDING STOCKPILES THAT WILL BE LEFT EXPOSED MORE THAN 7 DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL BE STABILIZED WITHIN 7 DAYS AFTER INITIAL DISTURBANCE USING, MULCH, OR EROSION CONTROL MATTING.
2. PERMANENT VEGETATION TO BE ESTABLISHED WITH TOPSOIL AND SEED ON ALL EXPOSED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADING. MULCH TO BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
3. ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH CT STANDARDS AND SPECIFICATIONS.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED IN PROPER WORKING CONDITION DURING THE PERIOD OF CONSTRUCTION. SILT FENCE IS TO BE CLEANED WHEN HALF OF THE FENCE IS BUILT UP BY SEDIMENT.
5. ADDITIONAL EROSION CONTROL MEASURES AND/OR MODIFICATIONS T PROPOSED MEASURES MAY BE NECESSARY DEPENDING ON ACTUAL SITE CONDITIONS.
6. THE PLANS AND DETAILS ARE BASED ON THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL.
7. A RAIN GAUGE SHALL BE KEPT ON-SITE. THE CONTRACTOR SHALL INSPECT ALL E&SC MEASURES AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER ANY STORM EVENT THAT GENERATES A DISCHARGE. REPAIRS SHALL BE MADE TO E&SC MEASURES IMMEDIATELY. RECORD OF INSPECTIONS AND CORRECTIVE ACTIONS SHALL BE KEPT ON-SITE.

EROSION AND SEDIMENT CONTROL MEASURES (CONT.)

8. WEATHER FORECAST SHALL BE MONITORED. THE CONTRACTOR SHALL PREPARE FOR RAIN EVENTS BY RE-EXAMINING ALL EROSION CONTROL MEASURES PRIOR TO THE START OF ANY PRECIPITATION. ANY RE-ENFORCEMENT OR CORRECTIONS SHOULD BE PERFORMED AND DOCUMENTED.
9. MATERIAL STOCKPILES MUST BE LOCATED AT LEAST 50' FROM STORM DRAINS OR WATER COURSES UNLESS NO ALTERNATIVE IS FEASIBLE.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN EROSION CONTROL ONSITE, REGARDLESS OF THE MEASURES REQUIRED. ANY CHANGE IN THE EROSION CONTROL MEASURES AND/OR GRADING SHAL BE CALLED TO THE ATTENTION OF THE ENGINEER AND THE EROSION CONTROL INSPECTOR.
11. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E., STEEP SLOPES AND ROADWAY EMBANKMENTS) SHALL BE STABILIZED.
12. ANY STEEP SLOPES RECEIVING UTILITY INSTALLATION SHALL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E., SLOPES GREATER THAN 1.5:1).
13. AMEND OR REPLACE TOPSOIL IF NECESSARY FOR VEGETATIVE ESTABLISHMENT.
14. REMOVE ANY SEDIMENT THAT MAY WASH OR TRACK OFF OF THE SITE. PAVED ROADS SHALL BE MAINTAINED IN A CLEAN, SWEPT CONDITION DAILY THROUGHOUT OPERATIONS.
15. ACCESS TO SITE SHALL BE RESTRICTED TO AREAS HAVING A STABILIZED CONSTRUCTION ENTRANCE.

PROJECT CONSTRUCTION SEQUENCING NOTES:

1. PRIOR TO COMMENCING CLEARING, GRUBBING, EARTHWORK ACTIVITIES, THAT MAY REQUIRE EROSION CONTROL MEASURES ETC. AT THE SITE, THE CONTRACTOR SHALL FLAG THE WORK LIMITS AND SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (I.E. SILT FENCES, TREE PROTECTION/BARRIER FENCES, STABILIZED CONSTRUCTION ENTRANCES, STORM DRAIN SEDIMENT FILTERS, DRAINAGE DITCH SEDIMENT FILTERS, ETC.) INDICATED ON THE PROJECT DRAWINGS. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THEIR TRIBUTARY AREAS.
2. PRIOR TO COMMENCING CLEARING, GRUBBING AND/OR EARTHWORK ACTIVITIES IN ANY OTHER AREA OF THE SITE, THE CONTRACTOR SHALL INSTALL INLET AND OUTLET PROTECTION MEASURES (RIPRAP OVERFLOW WEIR(S), CULVERT INLET/OUTLET PROTECTION, ETC.) AND SHALL STABILIZE THE AREAS DISTURBED DURING THE CONSTRUCTION OF THE SEDIMENT BASIN.
3. THE CONTRACTOR SHALL INSTALL TEMPORARY DIVERSION MEASURES WITH ASSOCIATED STABILIZATION MEASURES (I.E., VEGETATIVE COVER, DRAINAGE DITCH SEDIMENT FILTERS, STORM DRAIN SEDIMENT FILTERS, ETC.) PRIOR TO CONSTRUCTION.
4. TEMPORARY DIVERSION MEASURES SHALL BE LOCATED IN A MANNER THAT WILL ASSURE THAT THE AREA TRIBUTARY TO EACH DIVERSION DOES NOT EXCEED FIVE (5) ACRES. THESE TEMPORARY DIVERSION MEASURES SHALL BE INSPECTED DAILY AND REPAIRED/STABILIZED AS NECESSARY TO MINIMIZE EROSION.
5. THE CONTRACTOR SHALL COMMENCE SITE CONSTRUCTION ACTIVITIES AS REQUIRED.
6. IMMEDIATELY FOLLOWING COMPLETION OR SUSPENSION OF CONSTRUCTION ACTIVITIES IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SOILS.
7. SOILS THAT HAVE BEEN DISTURBED AND COMPACTED DUE TO CONSTRUCTION ACTIVITIES SHALL BE RESTORED IN ACCORDANCE WITH THE PROJECT SWCPP (WHICH INCLUDES DE-COMPACTION, COMPOST ADDITION AND TOPSOIL PLACEMENT).
8. UPON ESTABLISHMENT OF PERMANENT VEGETATIVE COVER ON ALL DISTURBED AREAS OF THE SITE, THE CONTRACTOR SHALL REMOVE THE CONSTRUCTION FABRIC FROM THE PRIMARY INLET OF THE OUTLET CONTROL STRUCTURE. THIS SHALL ONLY BE DONE WHEN THE PRIMARY OUTLET IS NO LONGER SUBMERGED.
9. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND IMMEDIATELY ESTABLISH PERMANENT VEGETATION ON THE AREAS DISTURBED DURING THEIR REMOVAL.

VEGETATIVE COVER SPECIFICATIONS:

SITE PREPARATION):

1. INSTALL NEEDED WATER AND EROSION CONTROL MEASURES AND BRING AREA TO BE SEEDED TO DESIRED GRADES USING A MINIMUM OF 4 IN. TOPSOIL.
2. PREPARE SEEDBED BY LOOSENING SOIL TO A DEPTH OF 4 TO 6 INCHES.
3. LIME TO PH OF 6.5.
4. FERTILIZE AS PER SOIL TEST, OR, IF FERTILIZER MUST BE APPLIED BEFORE SOIL TEST RESULTS ARE RECEIVED, APPLY 850 LBS. OF 10-10-10 OR EQUIVALENT PER ACRE (7.5 LBS PER 1,000 SQ. FT.).
5. INCORPORATE LIME AND FERTILIZER IN TOP 2-4 INCHES OF TOPSOIL.
6. SMOOTH. REMOVE LARGE STONES, STICKS AND FOREIGN MATTER FROM THE SURFACE.

TEMPORARY VEGETATIVE COVER (DURING CONSTRUCTION):

1. SEED MIX:
SPRING OR SUMMER OR EARLY FALL, SEED WITH BUCKWHEAT (FAGOPYRUM ESCULENTUM) AT A RATE OF 15 LBS. PER ACRE (APPROX. .4 LB./1,000 SQ. FT).

LATE FALL OR EARLY WINTER, SEED WITH WINTER WHEAT (TRITICUM AESTIVUM AT A RATE OF 120 LBS PER ACRE (APPROX. 3 LBS/1,000 SQ. FT.)

PERMANENT VEGETATIVE COVER (AFTER CONSTRUCTION):

1. SEED MIXTURES:
PROVIDE FRESH, CLEAN, NEW-CROP SEED MIXED IN THE PROPORTIONS SPECIFIED FOR SPECIES AND VARIETY, AND CONFORMING TO FEDERAL AND STATE STANDARDS. PROVIDE THE FOLLOWING MIXTURES:

DOT ALL-PURPOSE SEED MIX
AMOUNT BY:

WEIGHT	SPECIES OR VARIETY	LBS/1,000 SQ.FT.	LBS/ACRE
50.0%	SMOOTH BROMEGRASS	0.35	15
16.7%	PERENNIAL RYEGRASS	0.10	5
33.3%	BIRD'S FOOT TREFOIL	0.25	10
100%	TOTAL	0.79	30

2. TIME OF SEEDING: OPTIMUM TIMING OF SEEDING IS EARLY SPRING. MID JUNE THROUGH EARLY AUGUST IS NOT A GOOD TIME TO SEED, BUT MAY FACILITATE COVERING THE LAND WITHOUT ADDITIONAL DISTURBANCE IF CONSTRUCTION IS COMPLETE. PORTIONS OF THE SEEDING MAY FAIL DUE TO DROUGHT AND HEAT. THESE AREAS MAY NEED RESEEDING IN LATE SUMMER OR FALL OR THE FOLLOWING SPRING.

MULCHING

EXECUTION:

1. MULCHING SHALL BE REQUIRED ON ALL SEEDING. MULCH WILL REDUCE EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED IN COMPLIANCE WITH THIS MULCHING REQUIREMENT.
2. SPREAD STRAW OR HAY MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75% TO 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO 1,000 SQUARE FOOT SECTIONS AND DISTRIBUTE AT LEAST 90 POUNDS WITHIN EACH SECTION.
3. STRAW OR HAY MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. APPLICATIONS SHALL BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHALL BE UNIFORM IN APPEARANCE.

PRODUCTS:

MULCH MATERIALS SHALL BE WOOD FIBER APPLIED WITH A HYDROMULCH AT 2000 POUNDS PER ACRE, OR IF DRILLING, UNROTTED SMALL GRAIN STRAW OR HAY FREE OF SEEDS, OR SALT HAY APPLIED AT THE RATE OF 2 TONS PER ACRE (90 TO 100 POUNDS PER 1,000 SQUARE FEET).

FOR PERMITTING PURPOSES ONLY
- NOT FOR CONSTRUCTION -

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MARK	DATE	DESCRIPTION	BY
A	01/05/18	ISSUED FOR PERMITTING AND REVIEW	JS

WALLINGFORD RENEWABLE ENERGY
NEW HAVEN COUNTY, WALLINGFORD, CONNECTICUT

CONSTRUCTION SPECIFICATIONS

Project No.:	194-9002
Designed By:	KMT
Drawn By:	DS
Checked By:	RH

C-118

CAD FILE: 9002-WRE_C118-REV A.DWG

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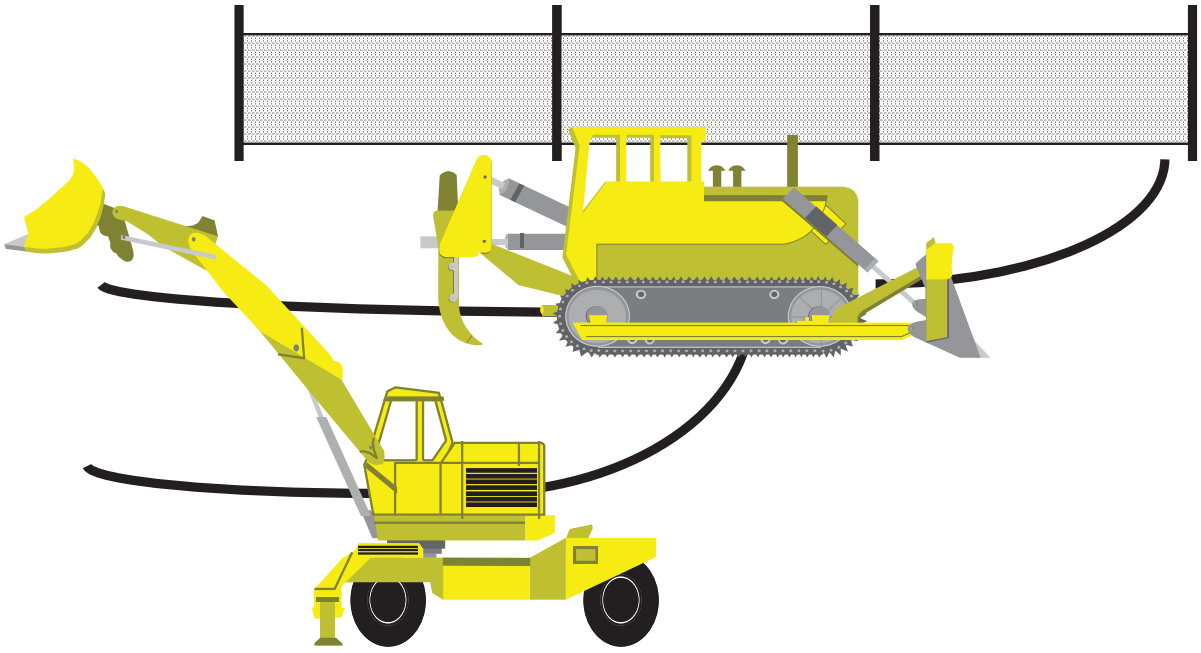
APPENDIX A
GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities



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General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Table of Contents

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Section 1. Authority

This general permit is issued under the authority of section 22a-430b of the Connecticut General Statutes.

Section 2. Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in section 22a-423 of the Connecticut General Statutes and section 22a-430-3(a) of the Regulations of Connecticut State Agencies. As used in this general permit, the following definitions shall apply:

"*x-year, 24-hour rainfall event*" means the maximum 24-hour precipitation event with a probable recurrence interval of once in the given number of years (i.e. x=2, 25 or 100), as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

"*Annual sediment load*" means the total amount of sediment carried by stormwater runoff on an annualized basis.

"*Aquifer protection area*" means aquifer protection area as defined in section 22a-354h of the Connecticut General Statutes.

"*Best engineering practices*" means the design of engineered control measures to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable.

"*CFR*" means the Code of Federal Regulations.

"*Coastal area*" means coastal area as defined in section 22a-93(3) of the Connecticut General Statutes.

"*Coastal waters*" means coastal waters as defined in section 22a-93(5) of the Connecticut General Statutes.

"*Commissioner*" means commissioner as defined in section 22a-2(b) of the Connecticut General Statutes.

"*Construction activity*" means any activity associated with construction at a site including, but not limited to, clearing and grubbing, grading, excavation, and dewatering.

"*Department*" means the Department of Energy & Environmental Protection.

"*Developer*" means a person who or municipality which is responsible, either solely or partially through contract, for the design and construction of a project site.

"*Dewatering wastewater*" means wastewater associated with the construction activity generated from the lowering of the groundwater table, the pumping of accumulated stormwater or uncontaminated groundwater from an excavation, the pumping of surface water from a cofferdam, or pumping of other surface water that has been diverted into a construction site.

"*District*" means a soil and water conservation district established pursuant to section 22a-315 of the Connecticut General Statutes. Appendix E lists the Districts, their geographic delineations, and contact information.

"*Disturbance*" means the execution of any of the construction activity(ies) defined in this general permit.

"*Effective Impervious Cover*" is the total area of a site with a Rational Method runoff coefficient of 0.7 or greater (or other equivalent methodology) from which stormwater discharges directly to a surface water or to a storm sewer system.

"*Engineered stormwater management system*" means any control measure and related appurtenances which requires engineering analysis and/or design by a professional engineer.

"*Erosion*" means the detachment and movement of soil or rock fragments by water, wind, ice and gravity.

"*Fresh-tidal wetland*" means a tidal wetland with an average salinity level of less than 0.5 parts per thousand.

"*Grab sample*" means an individual sample collected in less than fifteen minutes.

"*Groundwater*" means those waters of the state that naturally exist or flow below the surface of the ground.

"*Guidelines*" means the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, established pursuant to section 22a-328 of the Connecticut General Statutes.

"*High Quality Waters*" means those waters defined as high quality waters in the Connecticut Water Quality Standards published by the Department, as may be amended.

"*Impaired water(s)*" means those surface waters of the state designated by the commissioner as impaired pursuant to Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report.

"*In Responsible charge*" means professional experience for which the Commissioner determines that a professional's primary duties consistently involve a high level of responsibility and decision making in the planning and designing of engineered stormwater management systems or in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects. The Commissioner shall consider the following in determining whether a professional's experience qualifies as responsible charge experience:

(i) the level of independent decision-making exercised;

(ii) the number of individuals and the disciplines of the other professionals that the professional supervised or coordinated;

(iii) the extent to which a professional's responsibilities consistently involved the review of work performed by other professionals involved the planning and designing of engineered stormwater management systems or the planning and designing of soil erosion and sediment controls for residential and commercial construction projects;

(iv) the extent to which a professional's responsibilities consistently involved the planning and designing of engineered stormwater management systems or the planning and designing of soil erosion and sediment controls for residential and commercial construction projects and whether such responsibilities were an integral and substantial component of the professional's position;

(v) the nature of a professional's employer's primary business interests and the relation of those interests to planning and designing of engineered stormwater management systems or to planning and designing of soil erosion and sediment controls for residential and commercial construction projects;

(vi) the extent to which a professional has engaged in the evaluation and selection of scientific or technical methodologies for planning and designing of engineered stormwater management systems or for planning and designing of soil erosion and sediment controls for residential and commercial construction projects;

(vii) the extent to which a professional drew technical conclusions, made recommendations, and issued opinions based on the results of planning and designing of engineered stormwater management systems or of planning and designing of soil erosion and sediment controls for residential and commercial construction projects; or

(viii) any other factor that the Commissioner deems relevant.

"*Individual permit*" means a permit issued to a specific permittee under section 22a-430 of the Connecticut General Statutes.

"*Inland wetland*" means wetlands as defined in section 22a-38 of the Connecticut General Statutes.

"*Landscape Architect*" means a person with a currently effective license issued in accordance with chapter 396 of the Connecticut General Statutes.

"*Linear Project*" includes the construction of roads, railways, bridges, bikeways, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

"*Locally approvable project*" means a construction activity for which the registration is not for a municipal, state or federal project and is required to obtain municipal approval for the project.

"*Locally exempt project*" means a construction activity for which the registration is for a project authorized under municipal, state or federal authority and may not be required to obtain municipal approval for the project.

"*Low Impact Development*" or "*LID*" means a site design strategy that maintains, mimics or replicates pre-development hydrology through the use of numerous site design principles and small-scale treatment practices distributed throughout a site to manage runoff volume and water quality at the source.

"*Minimize*", for purposes of implementing the control measures in Section 5(*b*)(2) of this general permit, means to reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

"*Municipal separate storm sewer system*" or "*MS4*" means conveyances for stormwater (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or operated by any municipality and discharging to surface waters of the state.

"*Municipality*" means a city, town or borough of the state as defined in section 22a-423 of the Connecticut General Statutes.

"*Nephelometric Turbidity Unit*" or "*NTU*" means a unit measure of turbidity from a calibrated nephelometer.

"*Normal Working Hours*", for the purposes of monitoring under Section 5(*c*) of this general permit, are considered to be, at a minimum, Monday through Friday, between the hours of 8:00 am and 6:00 pm, unless additional working hours are specified by the permittee.

"*Permittee*" means any person who or municipality which initiates, creates or maintains a discharge in accordance with Section 3 of this general permit.

"*Person*" means person as defined in section 22a-423 of the Connecticut General Statutes.

"*Phase*" means a portion of a project possessing a distinct and complete set of activities that have a specific functional goal wherein the work to be completed in the phase is not dependent upon the execution of work in a later phase in order to make it functional.

"*Point Source*" means any discernible, confined and discrete stormwater conveyance (including but not limited to, any pipe, ditch, channel, tunnel, conduit, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft) from which pollutants are or may be discharged.

"*Professional Engineer*" or *"P.E."* means a person with a currently effective license issued in accordance with chapter 391 of the Connecticut General Statutes.

"*Qualified Inspector*" means an individual possessing either (1) a professional license or certification by a professional organization recognized by the commissioner related to agronomy, civil engineering, landscape architecture, soil science, and two years of demonstrable and focused experience in erosion and sediment control plan reading, installation, inspection and/or report writing for residential and commercial construction projects in accordance with the Guidelines; or (2) five years of demonstrable and focused experience in erosion and sediment control plan reading, installation, inspection and/or report writing for residential and commercial construction projects in accordance with the Guidelines; or (3) certification by the Connecticut Department of Transportation (DOT).

"*Qualified professional engineer*" means a professional engineer who has, for a minimum of eight years, engaged in the planning and designing of engineered stormwater management systems for residential and commercial construction projects in accordance with the Guidelines and the Stormwater Quality Manual including, but not limited to, a minimum of four years in responsible charge of the planning and designing of engineered stormwater management systems for such projects.

"*Qualified soil erosion and sediment control professional*" means a landscape architect or a professional engineer who: (1) has for a minimum of eight years engaged in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects in accordance with the Guidelines including, but not limited to, a minimum of four years in responsible charge of the planning and designing of soil erosion and sediment controls for such projects; or (2) is currently certified as a professional in erosion and sediment control as designated by EnviroCert International, Incorporated (or other certifying organization acceptable to the commissioner) and has for a minimum of six years experience engaged in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects in accordance with the Guidelines including, but not limited to, a minimum of four years in responsible charge in the planning and designing of soil erosion and sediment controls for such projects.

"*Registrant*" means a person or municipality that files a registration.

"*Registration*" means a registration form filed with the commissioner pursuant to Section 4 of this general permit.

"*Regulated Municipal Separate Storm Sewer System*" or "*Regulated MS4*" means the separate storm sewer system of the City of Stamford or any municipally-owned or -operated separate storm sewer system (as defined above) authorized by the most recently issued General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 general permit) including all those located partially

or entirely within an Urbanized Area and those additional municipally-owned or municipally-operated Small MS4s located outside an Urbanized Area as may be designated by the commissioner.

"*Retain*" means to hold runoff on-site to promote vegetative uptake and groundwater recharge through the use of runoff reduction or LID practices or other measures. In addition, it means there shall be no subsequent point source release to surface waters from a storm event defined in this general permit or as approved by the commissioner.

"*Runoff reduction practices*" means those post-construction stormwater management practices used to reduce post-development runoff volume delivered to the receiving water, as defined by retaining the volume of runoff from a storm up to the first half inch or one inch of rainfall in accordance with Sections 5(b)(2)(C)(i)(a) or (b), respectively. Runoff reduction is quantified as the total annual post-development runoff volume reduced through canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration or evapo-transpiration.

"*Sediment*" means solid material, either mineral or organic, that is in suspension, is transported, or has been moved from its site of origin by erosion.

"*Site*" means geographically contiguous land on which a construction activity takes place or on which a construction activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person shall be deemed the same site if such land is part of a linear project (as defined in this section) or is otherwise connected by a right-of-way, which such person controls.

"*Soil*" means any unconsolidated mineral and organic material of any origin.

"*Stabilize"* means the use of measures as outlined in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, or as approved by the commissioner, to prevent the visible movement of soil particles and development of rills.

"*Structural measure*" means a measure constructed for the temporary storage and/or treatment of stormwater runoff.

"*Standard Industrial Classification Code*" or "*SIC Code*" means those codes provided in the Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget 1987.

"S*tandard of care*", as used in Section 3(b), means to endeavor to perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

"*Stormwater*" means waters consisting of rainfall runoff, including snow or ice melt during a rain event.

"*Stormwater Quality Manual*" means the 2004 Connecticut Stormwater Quality Manual published by the Connecticut Department of Energy & Environmental Protection, as amended.

"*Surface water*" means that portion of waters, as the term "waters" is defined in section 22a-423 of the Connecticut General Statutes, located above the ground surface.

"*Tidal wetland*" means a wetland as that term is defined in section 22a-29(2) of the Connecticut General Statutes.

"*Total disturbance*" means the total area on a site where soil will be exposed or susceptible to erosion during the course of all phases of a project.

"*Total Maximum Daily Load*" or "*TMDL*" means the maximum capacity of a surface water to assimilate a pollutant as established by the commissioner, including pollutants contributed by point and non-point sources and a margin of safety.

"*Upland soils*" means soils which are not designated as poorly drained, very poorly drained, alluvial, or flood plain by the National Cooperative Soils Survey, as may be amended, of the Natural Resources Conservation Service of the United States Department of Agriculture and/or the inland wetlands agency of the municipality in which the project will take place.

"*Water company*" means water company as defined in section 25-32a of the Connecticut General Statutes.

"*Water Quality Standards or Classifications*" means those water quality standards or classifications contained in the Connecticut Water Quality Standards published by the Department, as may be amended.

"*Water Quality Volume*" or "*WQV*" means the volume of runoff generated by one inch of rainfall on a site as defined in the 2004 Connecticut Stormwater Quality Manual, as amended.

Section 3. Authorization Under This General Permit

(a) Eligible Activities

This general permit authorizes the discharge of stormwater and dewatering wastewaters to surface waters from construction activities on a site, as defined in this general permit, with a total disturbance of one or more acres of land area on a site, *regardless of project phasing*.

In the case of a larger plan of development (such as a subdivision), the estimate of total acres of site disturbance shall include, but is not limited to, road and utility construction, individual lot construction (e.g. house, driveway, septic system, etc.), and all other construction associated with the overall plan, regardless of the individual parties responsible for construction of these various elements.

(b) Requirements for Authorization

This general permit authorizes the construction activity listed in the "Eligible Activities" section (Section 3(*a*)) of this general permit provided:

(1) Coastal Management Act

Such construction activity must be consistent with all applicable goals and policies in section 22a-92 of the Connecticut General Statutes, and must not cause adverse impacts to coastal resources as defined in section 22a-93(15) of the Connecticut General Statutes. Please refer to the Appendix D for additional guidance.

(2) Endangered and Threatened Species

Such activity must not threaten the continued existence of any species listed pursuant to section 26-306 of the Connecticut General Statutes as endangered or threatened and must not result in the destruction or adverse modification of habitat designated as essential to such species. See Appendix A.

(3) Aquifer Protection Areas

Such construction activity, if it is located within an aquifer protection area as mapped under section 22a-354b of the General Statutes, must comply with regulations adopted pursuant to section 22a-354i of the General Statutes. Please refer to the Appendix C for additional guidance.

For any construction activity regulated pursuant to sections 8(c) and 9(b) of the Aquifer Protection Regulations (section 22a-354i(1)-(10) of the Regulations of Connecticut State Agencies), the Stormwater Pollution Control Plan (Plan) must assure that stormwater run-off generated from the regulated construction activity (i) is managed in a manner so as to prevent pollution of groundwater, and (ii) complies with all the requirements of this general permit.

(4) Mining Operations Exception

The stormwater discharge resulting from an activity classified as Standard Industrial Classification 10 through 14 (the mining industry) is not authorized by this general permit and is regulated under the most recently issued General Permit for the Discharge of Stormwater Associated with Industrial Activity.

(5) Discharge to POTW

The stormwater is *not* discharged to a Publicly Owned Treatment Works (POTW).

(6) Discharge to Groundwater

The stormwater is *not* discharged entirely to groundwater, meaning a stormwater discharge to a surface water will not occur up to a 100-year, 24-hour rainfall event.

(7) Such construction activity must be consistent with the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) for those river components and tributaries which have been designated as Wild and Scenic by the United States Congress. Further, such construction activities must not have a direct and adverse effect on the values for which such river designation was established. Please refer to Appendix H for additional guidance.

(8) Certification Requirements for Registrants and other Individuals

As part of the registration for this general permit, the registrant and any other individual or individuals responsible for preparing the registration submits to the commissioner a written certification which, at a minimum, complies with the following requirements:

(A) The registrant and any other individual or individuals responsible for preparing the registration and signing the certification has completely and thoroughly reviewed, at a minimum, this general permit and the following regarding the activities to be authorized under such general permit:

(i) all registration information provided in accordance with Section 4(*c*)(2) of such general permit;

(ii) the project site, based on a site inspection;

(iii) the Stormwater Pollution Control Plan; and

(iv) any plans and specifications and any Department approvals regarding such Stormwater Pollution Control Plan;

(B) The registrant and any other individual or individuals responsible for preparing the registration and signing the certification pursuant to this general permit has, based on the review described in section 3(*b*)(8)(A) of this general permit, made an affirmative determination to:

(i) comply with the terms and conditions of this general permit;

(ii) maintain compliance with all plans and documents prepared pursuant to this general permit including, but not limited to, the Stormwater Pollution Control Plan;

(iii) properly implement and maintain the elements of the Stormwater Pollution Control Plan; and

(iv) properly operate and maintain all stormwater management systems in compliance with the terms and conditions of this general permit to protect the waters of the state from pollution;

(C) Such registrant and any other individual or individuals responsible for preparing the registration certifies to the following statement: "I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(*b*)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(*b*)(8)(B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(9) The registrant has submitted to the commissioner a written certification by a professional engineer or, where appropriate, a landscape architect licensed in the State of Connecticut for the preparation, planning and design of the Stormwater Pollution Control Plan and stormwater management systems:

(A) The professional engineer or landscape architect shall certify to the following statement:

"I hereby certify that I am a [professional engineer][landscape architect] licensed in the State of Connecticut. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I certify that I have thoroughly and completely reviewed the Stormwater

Pollution Control Plan for the project or activity covered by this certification. I further certify, based on such review and on the standard of care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Quality Manual, as amended, and the conditions of the general permit, and that the controls required for such Plan are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement in this certification may subject me to sanction by the Department and/or be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(B) Nothing in this section shall be construed to authorize a professional engineer or a landscape architect to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(10) Plan Review and Certification by a District for Locally Approvable Projects

For those Plans not reviewed in accordance with Section 3(*b*)(11), below, the registrant has submitted to the commissioner a written certification by the appropriate regional District for the review of the Stormwater Pollution Control Plan pursuant to Appendix F, which, at a minimum, complies with the following requirements:

(A) the Plan Review Certification must be signed by the District. Information on the District review process is outlined in the Memorandum of Agreement provided in Appendix F. In cases where the District is unable to complete review of the Plan within the time limits specified in the Memorandum of Agreement in Appendix F, a notice to that effect signed by the District may be submitted in lieu of the certification.

(B) the Stormwater Pollution Control Plan has been prepared in accordance with the requirements of Section 5(*b*) of the general permit.

(C) Nothing in this subsection shall be construed to authorize District personnel to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(11) Plan Review and Certification by a Qualified Soil Erosion and Sediment Control Professional and Qualified Professional Engineer for Locally Approvable Projects

For those Plans not reviewed in accordance with Section 3(*b*)(10), above, the registrant has submitted to the commissioner a written certification by a qualified professional engineer or a qualified soil erosion and sediment control professional in accordance with the following requirements:

(A) for projects disturbing more than one acre and less than fifteen (15) acres, such qualified soil erosion and sediment control professional or qualified professional engineer:

(i) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant; and

(ii) has no ownership interest of any kind in the project for which the registration is being submitted.

(B) for projects disturbing fifteen (15) acres or more, such qualified soil erosion and sediment control professional or qualified professional engineer:

(i) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant;

(ii) did not engage in any activities associated with the preparation, planning, designing or engineering of such plan for soil erosion and sediment control or plan for stormwater management systems on behalf of such registrant;

(iii) is not under the same employ as any person who engaged in any activities associated with the preparation, planning, designing or engineering of such plans and specifications for soil erosion and sediment control or plans and specifications for stormwater management systems on behalf of such registrant; and

(iv) has no ownership interest of any kind in the project for which the registration is being submitted.

(C) The qualified professional engineer or qualified soil erosion and sediment control professional signing the certification has, at a minimum, completely and thoroughly reviewed this general permit and the following regarding the discharges to be authorized under such general permit:

(i) all registration information provided in accordance with Section 4(*c*)(2) of such general permit;

(ii) the site, based on a site inspection;

(iii) the Stormwater Pollution Control Plan;

(iv) the Guidelines;

(v) the Stormwater Quality Manual, if applicable; and

(vi) all non-engineered and engineered stormwater management systems, including any plans and specifications and any Department approvals regarding such stormwater management systems.

(D) Affirmative Determination

(i) The qualified soil erosion and sediment control professional signing the certification must have made an affirmative determination, based on the review described in section 3(*b*)(11)(C) of this general permit that:

(a) the Stormwater Pollution Control Plan prepared and certified pursuant to the registration is adequate to assure that the project or activity authorized under this general permit, if implemented in accordance with the Stormwater Pollution Control Plan, will comply with the terms and conditions of such general permit; and

(b) all non-engineered stormwater management systems:

(*I*) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically

practicable and that conform to those in the Guidelines and the Stormwater Quality Manual;

(*2*) will function properly as designed;

(*3*) are adequate to ensure compliance with the terms and conditions of this general permit; and

(*4*) will protect the waters of the state from pollution.

(ii) The qualified professional engineer signing the certification must have made an affirmative determination, based on the review described in section 3(*b*)(11)(C) of this general permit that:

(a) the Stormwater Pollution Control Plan prepared and certified pursuant to the registration is adequate to assure that the activity authorized under this general permit, if implemented in accordance with the Stormwater Pollution Control Plan, will comply with the terms and conditions of such general permit; and

(b) all non-engineered and engineered stormwater management systems:

(*1*) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable and that conform to those in the Guidelines and the Stormwater Quality Manual;

(*2*) will function properly as designed;

(*3*) are adequate to ensure compliance with the terms and conditions of this general permit; and

(*4*) will protect the waters of the state from pollution.

(E) The qualified professional engineer or qualified soil erosion and sediment control professional shall, provided it is true and accurate, certify to the following statement:

"I hereby certify that I am a qualified professional engineer or qualified soil erosion and sediment control professional, or both, as defined in the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and as further specified in sections 3(*b*)(11)(A) and (B) of such general permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(*b*)(11)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination in accordance with Sections 3(*b*)(11)(D)(i) and (ii) of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be

punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(F) Nothing in this subsection shall be construed to authorize a qualified soil erosion and sediment control professional or a qualified professional engineer to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(12) New Discharges to Impaired Waters

New stormwater discharges directly to an impaired water, as indicated in the State's Integrated Water Quality Report, must be in accordance with the following conditions:

(A) Stormwater discharges that go directly to impaired waters seeking authorization under this general permit shall comply with the requirements of this subsection (B) below if the indicated cause or potential cause of the impairment is one of the following:

- Site Clearance (Land Development or Redevelopment)
- Post-Development Erosion and Sedimentation
- Source Unknown (if cause of impairment is Sedimentation/Siltation)

(B) Such stormwater discharge is authorized if the permittee complies with the requirements of Section 5(*b*)(3) of this permit and receives a written affirmative determination from the commissioner that the discharge meets the requirements of that section. In such case, the permittee must keep a copy of the written determination onsite with the Plan. If the permittee does not receive such affirmative determination, the construction activity is not authorized by this general permit and must obtain an individual permit.

(c) Registration

Pursuant to the "Registration Requirements" section (Section 4) of this general permit, a completed registration with respect to the construction activity shall be filed with the commissioner as follows:

(1) Locally Approvable Projects

The registration must:

(A) Be electronically submitted, along with all required elements in subsections (B), (C) and (D), below, at least sixty (60) days prior to the planned commencement of the construction activity.

(B) Include the Registration Form (available at www.ct.gov/deep/stormwater).

(C) Include any additional forms and information regarding compliance and/or consistency with the Coastal Management Act, Impaired Waters (including TMDL requirements), Endangered and Threatened Species, and Aquifer Protection Areas that may be required pursuant to the "Requirements of Authorization" section (Section 3(*b*)).

(D) Include a Plan Review Certification in accordance with the "Plan Review Certification" (Section 5(*b*)(8)).

Locally Approvable projects may also choose to make their Plan electronically available in accordance with Section 4(*c*)(2)(N) of this general permit. The 60 day period cited in subsection

(A), above, will not begin until all required elements have been submitted. Failure to include any of these required submissions shall be grounds to reject the registration.

(2) Locally Exempt Projects

The registration must:

(A) Be electronically submitted, along with all required elements in subsections (B), (C) and (D), below, at least:

(i) sixty (60) days prior to the planned commencement of the construction activity if the site has a total disturbed area of between one (1) and twenty (20) acres; ***or***

(ii) ninety (90) days prior to the planned commencement of construction activity if the site:

(a) has a total disturbed area greater than twenty (20) acres;

(b) discharges to a tidal wetland (that is not a fresh-tidal wetland) within 500 feet of the discharge point; ***or***

(c) is subject to the impaired waters provisions of Section 3(*b*)(12).

(B) Include the Registration Form (available at www.ct.gov/deep/stormwater).

(C) Include any additional forms and information regarding compliance and/or consistency with the Coastal Management Act, Impaired Waters (including TMDL requirements), Endangered and Threatened Species, and Aquifer Protection that may be required pursuant to the "Requirements of Authorization" section (Section 3(*b*)).

(D) Include an electronic copy of the Stormwater Pollution Control Plan (Plan) (or a web address where the electronic Plan can be downloaded) for the commissioner's review. The electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in this electronic copy any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

The 60 or 90 day periods cited in subsections (A), above, will not begin until all required elements have been submitted. Failure to include any of these required submissions shall be grounds to reject the registration.

(3) Re-Registration of Existing Projects

For sites previously registered under any previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), a Re-Registration Form (available at www.ct.gov/deep/stormwater) pursuant to Section 4(*c*)(3) shall be submitted on or before February 1, 2014. The re-registration fee is payable (or waived) in accordance with Section 4(c)(1)(A)(iii). Resubmission of the permittee's Plan is not required unless specifically requested by the commissioner.

(d) Small Construction

For construction projects with a total disturbance of between one and five acres, the permittee shall adhere to the erosion and sediment control land use regulations of the municipality in which the construction activity is conducted, as well as the Guidelines and the Stormwater Quality Manual.

No registration or Plan review and certification shall be required for such construction activity provided a land-use commission of the municipality (i.e. planning/zoning, wetland, conservation, etc) reviews and issues a written approval of the proposed erosion and sediment control measures, pursuant to the requirements of section 22a-329 of the Connecticut General Statutes. In the absence of such municipal commission approval, the permittee shall register with the DEEP under the requirements for a Locally Exempt Project and comply with all applicable conditions of this general permit.

(e) Geographic Area

This general permit applies throughout the State of Connecticut.

(f) Effective Date and Expiration Date of this General Permit

The registration provisions of Section 3(*c*) and 4 of this General Permit, including any applicable definitions or provisions referred to in those sections insofar as they facilitate submission of a registration, shall be effective September 1, 2013. All remaining provisions of this General Permit shall be effective on October 1, 2013. The provisions of this General Permit shall expire on September 30, 2018.

(g) Effective Date of Authorization

A construction activity is authorized by this general permit at such time as specified in subsections (1) and (2), below.

(1) Authorization Timelines

The activity is authorized based on the following timelines unless superseded by subsection (2), below:

(A) for locally approvable projects, sixty (60) days after the submission of the registration form required by Section 4(*c*), or

(B) for locally exempt projects under 20 acres, sixty (60) days after the submission of the registration form required by Section 4(*c*), or

(C) for locally exempt projects over 20 acres, ninety (90) days after the submission of the registration form required by Section 4(*c*).

(2) Alternate Authorization Timelines

If one of the following conditions for authorization applies, that condition shall supersede those of subsection (1), above:

(A) for sites for which the registration and Plan availability and review provisions of Section 4(e) are completed prior to the authorization periods in subsection (1), above, the commissioner may authorize the activity upon such completion, or

(B) for sites subject to the conditions of Section 3(b)(2), 3(*b*)(12) and/or Section 5(*a*)(2), the activity is authorized on the date of the commissioner's affirmative determination and/or approval, or

(C) for sites authorized by any previous version of this general permit and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), the activity is authorized effective October 1, 2013. Authorization under this general permit shall cease if a re-registration form is not submitted on or before February 1. 2014.

(h) Revocation of an Individual Permit

If a construction activity is eligible for authorization under this general permit and such activity is presently authorized by an individual permit, the existing individual permit may be revoked by the commissioner upon a written request by the permittee. If the commissioner revokes such individual permit in writing, such revocation shall take effect on the effective date of authorization of such activity under this general permit.

(i) Issuance of an Individual Permit

If the commissioner issues an individual permit under section 22a-430 of the Connecticut General Statutes, authorizing a construction activity authorized by this general permit, this general permit shall cease to authorize that activity beginning on the date such individual permit is issued.

Section 4. Registration Requirements

(a) Who Must File a Registration

With the exception noted in the "Small Construction" section (Section 3(*d*)) of this general permit, any person or municipality which initiates, creates, originates or maintains a discharge described in the "Eligible Activities" section (Section 3(*a*)) of this general permit shall file with the commissioner a registration form that meets the requirements of the "Contents of Registration" section (Section 4(*c*)) of this general permit (or a re-registration form) and the applicable fee within the timeframes and in the amounts specified in Sections 3(*c*) and 4(*c*)(1)(A), respectively. Any such person or municipality filing a registration remains responsible for maintaining compliance with this general permit.

(b) Scope of Registration

Each registration shall be limited to the discharge at or from one site; no registration shall cover discharges at or from more than one site.

(c) Contents of Registration

(1) Fees

(A) Registration Fee

A registration, if required, shall not be deemed complete unless the registration fee has been paid in full.

(i) Locally Approvable Projects

A registration fee of $625.00 shall be submitted to the Department with the registration form.

(ii) Locally Exempt Projects

A registration fee shall be submitted with a registration form as follows:

(a) For sites with total disturbance of between one (1) and twenty (20) acres, the fee shall be $3,000.

(b) For sites with total disturbance equal to or greater than twenty (20) acres and less than fifty (50) acres, the fee shall be $4,000.

(c) For sites with total disturbance equal to or greater than fifty (50) acres, the fee shall be $5,000.

The fees for municipalities shall be half of those indicated in subsections (a), (b) and (c) above pursuant to section 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified in this subsection.

(iii) Re-registration

(a) For sites that registered under the previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities prior to September 1, 2012 and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), the re-registration fee shall be $625 payable with submission of the re-registration form within one hundred twenty (120) days from the effective date of this general permit. If a Notice of Termination is submitted prior to that time, no registration or fee are required.

(b) For sites that registered under the previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities on or after September 1, 2012 and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), the re-registration fee is waived.

(B) The registration fee shall be paid electronically or by check or money order payable to the Department of Energy & Environmental Protection.

(C) The registration fee is non-refundable.

(2) Registration Form

A registration shall be filed electronically on forms prescribed and provided by the commissioner (available at: www.ct.gov/deep/stormwater) and shall include, but not be limited to, the following:

(A) Legal name, address, and telephone number of the registrant. If the registrant is a person (as defined in Section 2 of this permit) transacting business in Connecticut and is registered with the Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State.

(B) Legal name, address and telephone number of the owner of the property on which the construction activity will take place.

(C) Legal name, address and telephone number of the primary contact for departmental correspondence and inquiries, if different from the registrant.

(D) Legal name, address and telephone number of the developer of the property on which the construction activity is to take place.

(E) Legal name, address and daytime and off-hours telephone numbers of the general contractor(s) or other representative(s), if different from the developer.

(F) Legal name, address and telephone number of any consultant(s), engineer(s) or landscape architect(s) retained by the permittee to prepare the registration and Stormwater Pollution Control Plan.

(G) Location address or description of the site for which the registration is filed.

(H) The estimated duration of the construction activity.

(I) Indication of the normal working hours of the site.

(J) A brief description of the construction activity, including, but not limited to:

(i) Total number of acres to be disturbed, regardless of phasing.

(ii) Assurance that construction is in accordance with the Guidelines and local erosion and sediment control ordinances, where applicable.

(iii) For sites in the Coastal Boundary, documentation that the DEEP Office of Long Island Sound Programs or local governing authority has issued a coastal site plan approval or a determination that the project is exempt from coastal site plan review (see Appendix D) in accordance with section 22a-92 and 22a-93(15) of the Connecticut General Statutes.

(iv) Documentation that the construction activity will not threaten the continued existence of any species listed pursuant to section 26-306 of the Connecticut General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species (see Appendix A).

(v) For sites discharging to certain impaired waters, as specified in Section 3(*b*)(12), documentation that the construction activity meets the requirements of that section and Section 5(*b*)(3) for authorization under this general permit.

(vi) Assurance that the construction activity is not located within an aquifer protection area (see Appendix C) as mapped under section 22a-354b of the Connecticut General Statutes or, if it is located within an aquifer protection area, that the construction activity will comply with regulations adopted pursuant to section 22a-354i of the Connecticut General Statutes.

(vii) For a proposed locally approvable project, a plan review certification from the appropriate District, qualified soil erosion and sediment control professional, and/or qualified professional engineer in accordance with Section 5(*b*)(10) or (11) or a notice from the District that they were unable to complete the Plan review within the time limits specified in the Memorandum of Agreement in Appendix F.

(K) A brief description of the stormwater discharge, including:

(i) The name of the municipal separate storm sewer system or immediate surface water body or wetland to which the stormwater runoff will discharge;

(ii) Verification of whether or not the site discharges to a tidal wetland (that is not a fresh-tidal wetland) within 500 feet of the discharge point, to a high quality water or to an impaired water with or without a TMDL;

(iii) The name of the watershed or nearest waterbody to which the site discharges.

(iv) Location of the stormwater discharge(s) including latitude and longitude.

(L) The total effective impervious cover for the site before and after the proposed construction activity.

(M) Documentation that the proposed construction activity has been reviewed for consistency with state Historic Preservation statutes, regulations, and policies including identification of any potential impacts on property listed or eligible for listing on the Connecticut Register of Historic Places. A review conducted for an Army Corps of Engineers Section 404 wetland permit would meet this qualification. Refer to Appendix G for guidance on conducting the required review.

(N) Registrants for locally approvable projects may, if they choose, attach an electronic copy of their Plan to their registration or provide a web address where their Plan may be downloaded. If an electronic plan is not provided, the registrant is still subject to the requirements for submission of a Plan to the commissioner or a member of the public pursuant to the "Plan Availability" section (Section 4(e)(2)). An electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in the Plan any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

(O) Registrants for all locally exempt projects must submit an electronic copy of their Plan or a web address where the electronic Plan can be downloaded. The electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in this Plan any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

(P) The certification of the registrant and of the individual or individuals responsible for actually preparing the registration, in accordance with Section 3(*b*)(8).

(Q) For all registrations, a design certification must be signed by a professional engineer in accordance with Section 3(*b*)(9).:

(R) For registrations for locally approvable projects a review certification must be signed by either: (i) a District in accordance with Section 3(*b*)(10), or (ii) a qualified soil erosion and sediment control professional and/or qualified professional engineer in accordance with either Section 3(*b*)(11).

If the registrant is not capable of submitting electronically, a paper form may be submitted in accordance with Section 4(*d*).

(3) Re-Registration Form

For sites previously registered under any previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), a re-registration shall be filed electronically pursuant to Sections 3(*c*)(3) and 3(*g*) on forms prescribed and provided by the commissioner (available at: www.ct.gov/deep/stormwater) and shall include, but not be limited to, the following:

(A) Legal name, address, and telephone number of the registrant. If the registrant is a person (as defined in Section 2 of this permit) transacting business in Connecticut and is registered with the Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State.

(B) The previously issued permit number (beginning with GSN).

(C) Legal name, address and telephone number of the owner of the property on which the construction activity will take place.

(D) Legal name, address and telephone number of the primary contact for departmental correspondence and inquiries, if different from the registrant.

(E) Legal name, address and telephone number of the developer of the property on which the subject construction activity is to take place.

(F) Legal name, address and daytime and off-hours telephone numbers of the general contractor(s) or other representative(s), if different from the developer.

(G) Legal name, address and telephone number of any consultant(s) or engineer(s) retained by the permittee to prepare the registration and Stormwater Pollution Control Plan.

(H) Location address or description of the site for which the re-registration is filed.

(I) Indication of the normal working hours of the site.

(J) The estimated duration of the construction activity.

(K) The signature of the registrant and of the individual or individuals responsible for actually preparing the re-registration, each of who shall certify in writing as follows:

"I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that all designs and plans for such activity meet the current terms and conditions of the general permit in accordance with Section 5(b)(5)(C) of such general permit and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section

3(*b*)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

If the registrant is not capable of submitting electronically, a paper form may be submitted in accordance with Section 4(*d*).

(d) Where to File a Registration

A registration (available at: www.ct.gov/deep/stormwater) shall be filed electronically with the commissioner in accordance with Section 3(*c*)(2) or (3). If the registrant does not have the capability to submit electronically, a paper registration may be filed at the following address:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

(e) Availability of Registration and Plan

By the fifteenth (15th) day of each month, the commissioner shall post on the DEEP website a list of registrations submitted in the previous month.

(1) Registration Availability

On or before fifteen (15) days from the date of posting by the commissioner, members of the public may review and comment on a registration. Any electronically available Plans will be posted with the corresponding registration.

(2) Plan Availability

(A) Electronic Plan Availability

For an electronically available Plan, on or before fifteen (15) days from the date of posting by the commissioner, members of the public may review and comment on a registrant's Plan.

(B) Non-Electronic Plan Availability

For any Plan that is not electronically available, on or before fifteen (15) days from the date of a registration posting by the commissioner, members of the public may submit a written request to the commissioner to obtain a copy of a registrant's Plan. The commissioner shall inform the registrant of the request and the name of the requesting party. If the commissioner does not already have access to a copy of the requested Plan, the registrant shall submit a copy of their Plan to the commissioner within seven (7) days of their receipt of such request. On or before fifteen (15) days from the date the commissioner makes a Plan available to the requesting party, they may submit written comments on the Plan to the commissioner.

(f) Additional Information

The commissioner may require a permittee to submit additional information that the commissioner reasonably deems necessary to evaluate the consistency of the subject construction activity with the requirements for authorization under this general permit.

(g) Additional Notification

For discharges authorized by this general permit to a regulated municipal separate storm sewer system, a copy of the registration and all attachments thereto shall also be submitted to the owner and operator of that system.

For discharges authorized by this general permit to a DOT separate storm sewer system, a copy of the registration and all attachments thereto shall also be submitted to the DOT upon request.

For discharges within a public drinking water supply watershed or aquifer area, a copy of the registration and the Plan described in subsection 5(*b*) of this general permit shall be submitted to the water company.

For discharges to river components and tributaries which have been designated as Wild and Scenic under the Wild and Scenic Rivers Act, a copy of the registration and the Plan described in 5(*b*) of this general permit shall be submitted to the applicable Wild and Scenic Coordinating Committee. Please refer to Appendix H for additional guidance

In addition, a copy of this registration and the Plan shall be available upon request to the local inland wetlands agency established pursuant to section 22a-42 of the Connecticut General Statutes, or its duly authorized agent.

(h) Action by Commissioner

(1) The commissioner may reject without prejudice a registration if it does not satisfy the requirements of the "Contents of Registration" section (subsection 4(*c*)) of this general permit. Any registration refiled after such a rejection shall be accompanied by the fee specified in the "Fees" subsection (subsection 4(*c*)(1)) of this general permit.

(2) The commissioner may disapprove a registration if is inconsistent with the requirements for authorization under the "Requirements for Registration" section (Section 3(*b*)) of this general permit, or for any other reason provided by law.

(3) Disapproval of a registration under this subsection shall constitute notice to the registrant that the subject construction activity must be authorized under an individual permit.

(4) Rejection or disapproval of a registration shall be in writing.

(i) Transition to New General Permit

On or after August 1, 2013, up until and including August 31, 2013, a person filing a new registration for a site may file such registration: (a) under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013; or (b) this general permit. A person filing a new registration for a site shall <u>not</u> register under both the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013 and this general permit. After August 31, 2013, a person filing a new registration for a site shall only register under this general permit and shall be authorized pursuant to Section 3(*g*) of this general permit.

(Note: Any person who, on or after August 1, 2013, up until and including August 31, 2013, files a new registration for a site under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013 shall, after October 1, 2013, re-register such site pursuant to Section 3(*c*)(3) and Section 4(*c*)(3) of this general permit.)

A person re-registering a site pursuant to Section 3(*c*)(3) and Section 4(*c*)(3) of this general permit may submit the required re-registration information anytime on or after August 1, 2013.

(j) Latest Date to Submit a Registration Under this General Permit

No person shall submit a registration under this general permit after June 30, 2018.

Section 5. Conditions of this General Permit

The permittee shall meet all requirements of this general permit at all times. In addition, a permittee shall be responsible for conducting authorized construction activities in accordance with the following conditions:

(a) Conditions Applicable to Certain Discharges

(1) Structures and Dredging in Coastal and Tidal Areas

Any person who or municipality that discharges stormwater into coastal tidal waters for which a permit is required under section 22a-361 of the Connecticut General Statutes (structures and dredging) or section 22a-32 of the Connecticut General Statutes (Tidal Wetlands Act), shall obtain such permit(s) from the commissioner. A tidal wetland permit is required for the placement of any sediment upon a tidal wetland, whether it is deposited directly or indirectly.

(2) Discharges to Tidal Wetlands

Any site which has a post-construction stormwater discharge to a tidal wetland (that is not a fresh-tidal wetland) where such discharge is within 500 feet of the tidal wetland, shall discharge such stormwater through a system designed to retain and infiltrate the volume of stormwater runoff generated by 1 inch of rainfall on the site. If there are site constraints that would prevent retention of this volume on-site (e.g., brownfields, capped landfills, bedrock, elevated groundwater, etc.), documentation must be submitted, for the commissioner's review and written approval, which explains the site limitations and offers an alternative retention volume. In such cases, the portion of 1 inch that cannot be retained must be provided with additional stormwater treatment so as to protect water quality. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual.

For sites unable to comply with this section, the commissioner, at the commissioner's sole discretion, may require the submission of an individual permit in lieu of authorization under this general permit.

(3) Toxicity to Aquatic and Marine Life

The discharge shall not cause pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.

(4) Water Quality Standards

The stormwater discharge shall not cause or contribute to an exceedance of the applicable Water Quality Standards in the receiving water.

(5) High Quality Waters

Any new or increased stormwater discharge to high quality waters shall be discharged in accordance with the Connecticut Anti-Degradation Implementation Policy in the Water Quality Standards.

(b) Stormwater Pollution Control Plan

All registrants shall develop and maintain on-site a Stormwater Pollution Control Plan (Plan) for the construction activity authorized by this general permit. Once the construction activity begins, the permittee shall perform all actions required by such Plan and shall maintain compliance with the Plan thereafter. The Plan shall be designed to minimize (as defined in Section 2): (1) pollution caused by soil erosion and sedimentation during and after construction; and (2) stormwater pollution caused by use of the site after construction is completed.

(1) Development and Contents of Plan

(A) The Plan shall consist of site plan drawings and a narrative. The Plan shall be prepared in accordance with sound engineering practices, and shall be consistent with the Guidelines and the 2004 Connecticut Stormwater Quality Manual (available at http://www.ct.gov/deep/stormwater). The Plan shall also be consistent with any remedial action plan, closure plan or other plan required by any other DEEP permit.

(B) The Plan shall include, at a minimum, the following items:

(i) Site Plan

Site drawings indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, the location of major structural and non-structural controls (as specified in subsection 5(*b*)(2), below), the location of areas where stabilization practices are expected to occur, areas which will be vegetated following construction, monitored outfalls, surface waters, impaired waters (identifying those with and without a TMDL), high quality waters, inland wetlands, tidal wetlands, fresh-tidal wetlands, and locations where stormwater will be discharged to a surface water (both during and post-construction);

(ii) Site Description

(a) A narrative description of the nature of the construction activity;

(b) An estimate of the total area of the site and the total area of the site that is expected to be disturbed by construction activities;

(c) An estimate of the average runoff coefficient of the site after construction activities are completed;

(d) The name of the immediate receiving water(s) and the ultimate receiving water(s) of the discharges authorized by this general permit; and

(e) Extent of wetland acreage on the site.

(iii) Construction Sequencing

The Plan shall clearly identify the expected sequence of major construction activities on the site and corresponding erosion and sediment controls and shall include an estimated timetable for all construction activities, which shall be revised as necessary to keep the Plan current. Wherever possible, the site shall be phased to avoid the disturbance of over five acres at one time (or a lesser area of disturbance as required in the "Impaired Waters" section (Section 5(*b*)(3)). The Plan shall clearly show the limits of disturbance for the entire construction activity and for each phase.

(iv) Control Measures

The Plan shall include a description, in narrative and on the site plan drawings, of appropriate control measures that will be performed at the site to minimize the discharge of pollutants to waters of the state. Control measures shall be implemented in accordance with Section 5(*b*)(2) below. In addition, the following information shall be provided:

(a) Calculations supporting the design of sediment and floatables removal controls pursuant to Section 5(*b*)(2)(C)(ii)(b).

(b) Calculations supporting the design of velocity dissipation controls pursuant to Section 5(*b*)(2)(C)(ii)(c).

(v) Runoff Reduction and Low Impact Development (LID) Information

Where runoff reduction practices and/or LID measures are utilized, the following information shall be included in the site plan and narrative:

(a) The location of the site's streams, floodplains, all wetlands, riparian buffers, slopes 3:1 and steeper, and vegetation identified for preservation and non-disturbance during construction such as forested areas, hay fields, and old fields;

(b) Natural drainage patterns, swales, and other drainage ways, that are not streams, floodplains, or wetland areas;

(c) The location of all areas with soils suitable for infiltration[1] and areas of the site best suited for infiltration for the siting of runoff reduction practices and LID design measures;

(d) The location of all areas unsuitable or least suitable for infiltration for the siting of areas of development/building;

(e) The location of all post-construction stormwater management measures, runoff reduction practices and LID design measures developed pursuant to subsection 5(*b*)(2)(C)(i) below;

(f) Identification of areas inappropriate for the infiltration of stormwater runoff from land uses with a significant potential for groundwater pollution;

1 Infiltration rates must be measured by a field permeability test. The measured field design infiltration rate is equal to one-half the field-measured infiltration rate.

(g) A narrative describing the nature, purpose, implementation and long-term maintenance of the post-construction measures, runoff reduction practices and LID design measures;

(h) Calculations, for measures developed pursuant to Section 5(*b*)(2)(C)(i), illustrating the retention of the water quality volume or half the water quality volume for the site, as applicable, including a discussion of the impact of any runoff reduction and/or LID practices on these calculations.

(i) A narrative describing any site constraints that prevent retention of the appropriate volume specified in Section 5(*b*)(2)(C)(i) including: an explanation of the site limitations; a description of the runoff reduction practices implemented; an explanation of why the amount retained constitutes the maximum extent achievable; an alternative retention volume; and a description of the measures used to provide additional stormwater treatment for sediment, floatables and nutrients above the alternate volume up to the water quality volume.

(j) Calculations showing the proposed effective impervious cover for the site and, where necessary or appropriate for measures developed for linear projects pursuant to Section 5(*b*)(2)(C)(i), each outfall drainage area.

(vi) Inspections

The Plan shall include a narrative of all inspection personnel conducting the routine inspections, their responsibilities and procedures pursuant to subsection 5(*b*)(4)(B) below. The Plan shall also include documentation of the qualifications of the inspector(s) and the findings, actions and results of all inspections conducted at the site.

(vii) Monitoring

The Plan shall provide a narrative of the stormwater monitoring procedures pursuant to Section 5(*c*). This narrative shall include documentation of the monitoring frequency, personnel conducting monitoring, identification of monitored outfalls, methodology for monitoring, provisions for monitoring a linear project (if applicable), the site's normal working hours, the method for measuring turbidity and a copy of all monitoring records.

(viii) Contractors

(a) The Plan shall clearly identify each contractor and subcontractor that will perform construction activities on the site that have the potential to cause pollution of the waters of the State. The Plan shall include a copy of the certification statement in the "Contractor Certification Statement" section, below, signed by each such contractor and subcontractor.

(b) Contractor Certification Statement

The Plan shall include the following certification signed by each contractor and subcontractor identified in the Plan as described above:

"I certify under penalty of the law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor or

subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site."

The certification shall include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

(c) Subdivisions

Where individual lots in a subdivision or other common plan of development are conveyed or otherwise the responsibility of another person or municipality, those individual lot contractors shall be required to comply with the provisions of this general permit and the Stormwater Pollution Control Plan, and shall sign the certification statement in the "Contractor Certification Statement" section, above, regardless of lot size or disturbed area. In such cases, the permittee shall provide a copy of the Plan to each individual lot contractor, obtain signed certifications from such contractors and retain all signed certifications in the Plan.

(ix) Impaired Waters

For construction activities that discharge to impaired waters, as specified in "New Discharges to Impaired Waters" (Section 3(*b*)(12)), the Plan shall include a description of the provisions for controlling the construction and post-construction stormwater discharges to these waters pursuant to subsection 5(*b*)(3) below.

(2) Stormwater Control Measures

Control Measures are required Best Management Practices (BMPs) that the permittee must implement to minimize the discharge of pollutants from the permitted activity. The term "minimize" means reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

Control Measures shall be designed in accordance with the Guidelines, the Stormwater Quality Manual or the DOT Qualified Products List (http://www.ct.gov/dot/lib/dot/documents/dresearch/conndot_qpl.pdf). Use of controls to comply with the "Erosion and Sediment Controls" section (subsection (A) below) of this general permit that are not included in those resources must be approved by the commissioner or the commissioner's designated agent. The narrative and drawings of controls shall address the following minimum components:

(A) Erosion and Sediment Controls

(i) Soil Stabilization and Protection

The Plan shall include a narrative and drawings of interim and permanent soil stabilization practices for managing disturbed areas and soil stockpiles, including a schedule for implementing the practices. The Permittee shall ensure that existing vegetation is preserved to the maximum extent practicable and that disturbed portions of the site are minimized and stabilized.

Where construction activities have permanently ceased or when final grades are reached in any portion of the site, stabilization and protection practices as specified in Chapter 5 of the Guidelines or as approved by the commissioner or his/ her designated agent shall be implemented within seven days. Areas that will remain disturbed but inactive for at least thirty days shall receive temporary seeding or soil protection within seven days in accordance with the Guidelines.

Areas that will remain disturbed beyond the seeding season as identified in the Guidelines, shall receive long-term, non-vegetative stabilization and protection sufficient to protect the site through the winter. In all cases, stabilization and protection measures shall be implemented as soon as possible in accordance with the Guidelines or as approved by the commissioner or his/ her designated agent.

A reverse slope bench is required for any slope steeper than 3:1 (horizontal: vertical) that exceeds 15 feet vertically, except when engineered slope stabilization structures or measures are included or a detailed soil mechanics analysis has been conducted to verify stability. Engineered analyses and measures must be designed by a CT licensed Professional Engineer with experience in geotechnical engineering or soil mechanics.

(ii) Structural Measures

The Plan shall include a narrative and drawings of structural measures to divert flows away from exposed soils, store flows or otherwise limit runoff and minimize the discharge of pollutants from the site. Unless otherwise specifically approved in writing by the commissioner or his/ her designated agent, or if otherwise authorized by another state or federal permit, structural measures shall be installed on upland soils.

For points of discharge from disturbed sites with a total contributing drainage area of between two to five acres, a temporary sediment trap must be installed in accordance with the Guidelines. For points of discharge from disturbed sites with a total contributing drainage area greater than five acres, a temporary basin must be designed and installed in accordance with the Guidelines. Such trap(s) or basin(s) must be maintained until final stabilization of the contributing area as defined in "Notice of Termination" (Section 6(a)).

The requirement for sediment traps or basins shall not apply to flows from off-site areas and flows from the site that are either undisturbed or have undergone final stabilization where such flows are diverted around the temporary sediment trap or basin. Any exceptions must be approved in writing by the commissioner or his/ her designated agent.

(iii) Maintenance

The Plan shall include a narrative of the procedures to maintain in good and effective operating conditions all erosion and sediment control measures, including vegetation, and all other protective measures identified in the site plan. Maintenance of all erosion and sediment controls shall be performed in accordance with the Guidelines, or more frequently as necessary, to protect the waters of the state from pollution.

(B) Dewatering Wastewaters

Dewatering wastewaters shall be managed in accordance with the Guidelines. Dewatering wastewaters discharged to surface waters shall be discharged in a manner that minimizes the discoloration of the receiving waters. The Plan shall include a narrative and drawings of the

operational and structural measures that will be used to ensure that all dewatering wastewaters will not cause scouring or erosion or contain suspended solids in amounts that could reasonably be expected to cause pollution of surface waters of the State. Unless otherwise specifically approved in writing by the commissioner or his/ her designated agent, or if otherwise authorized by another state or federal permit, dewatering measures shall be installed on upland soils.

No discharge of dewatering wastewater(s) shall contain or cause a visible oil sheen, floating solids, or foaming in the receiving water.

(C) Post-Construction Stormwater Management

The Plan shall include a narrative and drawings of measures that will be installed during the construction process to minimize the discharge of pollutants in stormwater discharges that will occur after construction operations have been completed. Post-construction stormwater management measures shall be designed and implemented in accordance with the Stormwater Quality Manual, the DOT Qualified Products List or as approved by the commissioner or his/ her designated agent in writing. Unless otherwise specifically provided by the commissioner in writing, or authorized by another state or federal permit, structural measures shall be placed on upland soils. The Plan shall include provisions to address the long-term maintenance of any post-construction stormwater management measure installed.

(i) Post-Construction Performance Standards

The permittee shall utilize runoff reduction practices (as defined in Section 2) to meet runoff volume requirements based on the conditions below. For sites unable to comply with these conditions, the commissioner, at the commissioner's sole discretion, may require the submission of an individual permit in lieu of authorization under this general permit.

(a) Redevelopment

For sites that are currently developed with an effective impervious cover of forty percent or more and for which the permittee is proposing redevelopment, the permittee shall design the site in such a manner as to retain on-site half the water quality volume (as defined in Section 2) for the site and provide additional stormwater treatment without retention for discharges up to the full water quality volume for sediment, floatables and nutrients to the maximum extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice. In cases where the permittee is not able to retain half the water quality volume, the permittee shall design the redevelopment to retain runoff volume to the maximum extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice. In such cases, additional stormwater treatment up to the full water quality volume is still required. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual. If retention of the half the water quality volume is not achieved, the permittee shall submit a report to the commissioner describing: the measures taken to maximize runoff reduction practices on the site; the reasons why those practices constitute the maximum extent achievable; the alternative retention volume; and a description of the measures used to provide additional stormwater treatment above the alternate volume up to the water quality volume. In the case of linear redevelopment projects (e.g. roadway reconstruction or widening) for the developed portion of

the right of way: (1) for projects that may be unable to comply with the full retention standard, the alternate retention and treatment provisions may also be applied as specified above, or (2) for projects that will not increase the effective impervious cover within a given watershed, the permittee shall implement the additional stormwater treatment measures referenced above, but will not be required to retain half of the water quality volume.

(b) Other Development

The following performance standard applies to all sites that are currently undeveloped or are currently developed with less than forty percent effective impervious cover. For these sites, the permittee shall design the site to retain the water quality volume for the site. If there are site constraints that would prevent retention of this volume on-site (e.g., brownfields, capped landfills, bedrock, elevated groundwater, etc.), documentation must be submitted, for the commissioner's review and written approval, which: explains the site limitations; provides a description of the runoff reduction practices implemented; provides an explanation of why this constitutes the maximum extent achievable; offers an alternative retention volume; and provides a description of the measures used to provide additional stormwater treatment for sediment, floatables and nutrients above the alternate volume up to the water quality volume. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual. In the case of linear projects that do not involve impervious surfaces (e.g. electrical transmission rights-of-way or natural gas pipelines), retention of the water quality volume is not required as long as the post-development runoff characteristics do not differ significantly from pre-development conditions.

(ii) Post-Construction Control Measures

(a) Runoff Reduction and Low Impact Development ("LID") Practices

The site design shall incorporate runoff reduction practices, low impact development ("LID") practices or other measures to meet the performance standards in subsection (i) above, promote groundwater recharge and minimize post-construction impacts to water quality. Please refer to Appendix B for additional guidance information.

(b) Suspended Solids and Floatables Removal

The permittee shall install post-construction stormwater management measures designed to minimize the discharge of suspended solids and floatables (e.g. oil and grease, other floatable liquids, floatable solids, trash, etc.) from stormwater. A goal of 80 percent removal of the annual sediment load from the stormwater discharge shall be used in designing and installing stormwater management measures. The Plan shall provide calculations supporting the capability of such measures in achieving this goal and any third-party verification, as applicable, of the sediment removal efficiencies of such measures. This goal is not intended to limit local approval authorities from requiring a higher standard pursuant to local requirements.

(c) Velocity Dissipation

Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow to the receiving watercourse so that the natural physical and biological characteristics and functions are maintained and protected.

(D) Other Controls

The following additional controls shall be implemented:

(i) Waste Disposal: Best management practices shall be implemented to minimize the discharge of litter, debris, building materials, hardened concrete waste, or similar materials to waters of the State. A narrative of these practices shall be provided in the Plan.

(ii) Washout Areas

Washout of applicators, containers, vehicles and equipment for concrete, paint and other materials shall be conducted in a designated washout area. There shall be no surface discharge of washout wastewaters from this area. Such washout shall be conducted: (1) outside of any buffers and at least 50 feet from any stream, wetland or other sensitive resource; or (2) in an entirely self-contained washout system. The permittee shall clearly flag off and designate areas to be used for washing and conduct such activities only in these areas. The permittee shall direct all washwater into a container or pit designed such that no overflows can occur during rainfall or after snowmelt.

In addition, dumping of liquid wastes in storm sewers is prohibited. The permittee shall remove and dispose of hardened concrete waste consistent with practices developed for the "Waste Disposal" section (subparagraph 5(*b*)(2)(D)(i), above). At least once per week, the permittee must inspect any containers or pits used for washout to ensure structural integrity, adequate holding capacity, and to check for leaks or overflows. If there are signs of leaks, holes or overflows in the containers or pits that could lead to a discharge, the permittee shall repair them prior to further use. For concrete washout areas, the permittee shall remove hardened concrete waste whenever the hardened concrete has accumulated to a height of ½ of the container or pit or as necessary to avoid overflows. A narrative of maintenance procedures and a record of maintenance and inspections shall be included in the Plan.

(iii) Off-site vehicle tracking of sediments and the generation of dust shall be minimized. Wet dust suppression shall be used, in accordance with section 22a-174-18(b) of the Connecticut General Statutes, for any construction activity that causes airborne particulates. The volume of water sprayed for controlling dust shall be minimized so as to prevent the runoff of water. No discharge of dust control water shall contain or cause a visible oil sheen, floating solids, visible discoloration, or foaming in the receiving stream.

(iv) All post-construction stormwater structures shall be cleaned of construction sediment and any remaining silt fence shall be removed upon stabilization of the site.

(v) All chemical and petroleum product containers stored on the site (excluding those contained within vehicles and equipment) shall be provided with impermeable containment which will hold at least 110% of the volume of the largest container, or

10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. All chemicals and their containers shall be stored under a roofed area except for those chemicals stored in containers of 100 gallon capacity or more, in which case a roof is not required. Double-walled tanks satisfy this requirement.

(3) Additional Control Measures for Impaired Waters

For construction activities that discharge directly to impaired waters, as specified in "New Discharges to Impaired Waters" (Section 3(*b*)(12)), the Plan shall include the following provisions:

(A) In lieu of the provisions of "Construction Sequencing" (Section 5(*b*)(1)(B)(iii)), no more than 3 acres may be disturbed at any one time. For those areas for which construction activity will be temporarily suspended for a period of greater than 14 days, temporary stabilization measures shall be implemented within 3 days of such suspension of activity. For all areas, permanent stabilization shall be implemented within 30 days of disturbance; ***or***

(B) The Plan shall document that measures are in place to ensure that there will be no discharge to the impaired water from rain events up to a 2-year, 24-hour rain event while construction activity is occurring; ***or***

(C) For discharges to impaired waters with an established TMDL:

(i) the Plan shall document that there is sufficient remaining Waste Load Allocation (WLA) in the TMDL to allow the discharge, ***and***

(ii) measures shall be implemented to ensure the WLA will not be exceeded, ***and***

(iii) stormwater discharges shall be monitored, if applicable, for any indicator pollutant identified in the TMDL for every rain event that produces a discharge to ensure compliance with the WLA. Such monitoring shall be in addition to the requirements specified in Section 5(*c*), ***or***

(iv) the specific requirements for stormwater discharges specified in the TMDL are met.

Construction activities discharging to impaired waters that do not comply with this subsection are not authorized by this general permit.

(4) Inspections

All construction activities submitting a registration for this general permit shall be inspected initially for Plan implementation and then weekly for routine inspections.

(A) Plan Implementation Inspections

Within the first 30 days following commencement of the construction activity on the site, the permittee shall contact: (1) the appropriate District; or (2) a qualified soil erosion and sediment control professional or a qualified professional engineer to inspect the site. The site shall be inspected at least once and no more than three times during the first 90 days to confirm compliance with the general permit and proper initial implementation of all controls measures designated in the Plan for the site for the initial phase of construction. For sites not inspected by District personnel, the following conditions shall apply:

(i) for projects disturbing more than one acre and less than fifteen (15) acres, the inspector shall be someone who:

(a) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant, and

(b) has no ownership interest of any kind in the project for which the registration is being submitted.

(ii) for projects disturbing fifteen (15) acres or more, the inspector shall be someone who:

(a) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant, and

(b) has not engaged in any activities associated with the preparation, planning, designing or engineering of such plan for soil erosion and sediment control or plan for engineered stormwater management systems on behalf of such registrant, and

(c) is not under the same employ as any person who engaged in any activities associated with the preparation, planning, designing or engineering of such plans and specifications for soil erosion and sediment control or plans and specifications for engineered stormwater management systems on behalf of such registrant, and

(d) has no ownership interest of any kind in the project for which the registration is being submitted.

The permittee may use, if they wish, the same person(s) that provided the Plan Review Certification pursuant to Section 5(*b*)(11).

(B) Routine Inspections

The permittee shall routinely inspect the site for compliance with the general permit and the Plan for the site until a Notice of Termination has been submitted. Inspection procedures for these routine inspections shall be addressed and implemented in the following manner:

(i) The permittee shall maintain a rain gauge on-site to document rainfall amounts. At least once a week and within 24 hours of the end of a storm that generates a discharge, a qualified inspector (provided by the permittee), as defined in the "Definitions" section (Section 2) of this general permit, shall inspect, at a minimum, the following: disturbed areas of the construction activity that have not been finally stabilized; all erosion and sedimentation control measures; all structural control measures; soil stockpile areas; washout areas and locations where vehicles enter or exit the site. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and impacts to the receiving waters. Locations where vehicles enter or exit the site shall also be inspected for evidence of off-site sediment tracking. For storms that end on a weekend, holiday or other time after which normal working hours will not commence within 24 hours, an inspection is required within 24 hours only for storms that equal or exceed 0.5 inches. For storms of less than 0.5 inches, an inspection shall occur immediately upon the start of the subsequent normal working hours. Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least once every month for three months.

(ii) The qualified inspector(s) shall evaluate the effectiveness of erosion and sediment controls, structural controls, stabilization practices, and any other controls implemented

to prevent pollution and determine if it is necessary to install, maintain, or repair such controls and/or practices to improve the quality of stormwater discharge(s).

(iii) A report shall be prepared and retained as part of the Plan. This report shall summarize: the scope of the inspection; name(s) and qualifications of personnel making the inspection; the date(s) of the inspection; weather conditions including precipitation information; major observations relating to erosion and sediment controls and the implementation of the Plan; a description of the stormwater discharge(s) from the site; and any water quality monitoring performed during the inspection. The report shall be signed by the permittee or his/her authorized representative in accordance with the "Certification of Documents" section (subsection 5(*i*)) of this general permit.

The report shall include a statement that, in the judgment of the qualified inspector(s) conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the Plan and permit. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance. Non-engineered corrective actions (as identified in the Guidelines) shall be implemented on site within 24 hours and incorporated into a revised Plan within three (3) calendar days of the date of inspection unless another schedule is specified in the Guidelines. Engineered corrective actions (as identified in the Guidelines) shall be implemented on site within seven (7) days and incorporated into a revised Plan within ten (10) days of the date of inspection, unless another schedule is specified in the Guidelines or is approved by the commissioner. During the period in which any corrective actions are being developed and have not yet been fully implemented, interim measures shall be implemented to minimize the potential for the discharge of pollutants from the site.

(iv) Inspectors from the DEEP and the appropriate District may inspect the site for compliance with this general permit at any time construction activities are ongoing and upon completion of construction activities to verify the final stabilization of the site and/or the installation of post-construction stormwater management measures pursuant to Section 6(*a*).

(v) Additional inspections, reports and documentation may also be required to comply with the "Monitoring Requirements" section (Section 5(*c*)).

(5) Keeping Plans Current

The Permittee is responsible for keeping their Plan in compliance with this general permit at all times. This may involve any or all of the following:

(A) The permittee shall amend the Plan if the actions required by the Plan fail to prevent pollution or fail to otherwise comply with any other provision of this general permit. The Plan shall also be amended whenever there is a change in contractors or subcontractors at the site, or a change in design, construction, operation, or maintenance at the site which has the potential for the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the Plan.

(B) The commissioner may notify the permittee at any time that the Plan and/or the site do not meet one or more of the minimum requirements of this general permit. Within 7 days of such notice, or such other time as the commissioner may allow, the permittee shall make the required changes to the Plan and perform all actions required by such revised Plan. Within 15 days of such notice, or such other time as the commissioner may allow, the permittee shall submit to the commissioner a written certification that the requested changes have been

made and implemented and such other information as the commissioner requires, in accordance with the 'Duty to Provide Information" and "Certification of Documents" sections (subsections 5(*h*) and 5(*i*)) of this general permit.

(C) For any stormwater discharges authorized under any previous version of this general permit, the existing Plan shall be updated by February 1, 2014, as applicable, in accordance with the "Development and Contents of the Plan" (subsection 5(*b*)(1)), "Stormwater Control Measures" (subsection 5(*b*)(2)), "Routine Inspections" (subsection 5(*b*)(4)(B)), and "Monitoring" (subsection 5(*c*)) sections of this general permit, except for the post-construction measures in subsection 5(*b*)(2)(C)(i)(a) & (b) and 5(*b*)(2)(C)(ii)(a). The permittee shall maintain compliance with such Plan thereafter. For previously authorized sites discharging to impaired waters or other sensitive areas, the commissioner may require additional control measures or provide authorization under an individual permit pursuant to Sections 4(*h*) and 3(*i*).

(6) Failure to Prepare, Maintain or Amend Plan

In no event shall failure to complete, maintain or update a Plan, in accordance with the "Development of Contents of the Plan" and "Keeping Plans Current" sections (subsections 5(*b*)(1) and 5(*b*)(5)) of this general permit, relieve a permittee of responsibility to implement any actions required to protect the waters of the state and to comply with all conditions of the permit.

(7) Plan Signature

The Plan shall be signed and certified as follows:

(A) The Plan shall be signed by the permittee in accordance with the "Certification of Documents" section (subsection 5(*i*)) of this general permit.

(B) The Plan shall include certification by all contractors and subcontractors in accordance with the "Contractors" section (subsection 5(*b*)(1)(B)(viii)) of this general permit.

(C) The Plan shall include a copy of the certification by a professional engineer or landscape architect made in accordance with Section 3(*b*)(9) of this general permit.

(8) Plan Review Certification

For a locally approvable project pursuant to Section 3(*c*) of this general permit, a copy of the Plan review certification made in accordance with either Section 3(*b*)(10) or (11) shall be maintained with the Plan. Note that construction activities reviewed and certified pursuant to those sections are still subject to the local erosion and sediment control and stormwater management regulations of the municipality in which the activity is conducted.

(9) Plan Submittal

The Plan shall be submitted to the commissioner and other certain parties under the following conditions:

(A) All Locally Exempt Projects with greater than one acre of soil disturbance shall submit an electronic copy of the Plan and a completed Registration Form to the commissioner.

(B) For all other projects, the permittee shall provide a copy of the Plan, and a completed Registration Form for this general permit to the following persons immediately upon request:

(i) The commissioner at his or her request or at the request of a member of the public during the registration and Plan availability period pursuant to Section 4(*e*);

(ii) The municipal planning commission, zoning commission and/or inland wetlands agency, or its respective enforcement officer or designated agent;

(iii) In the case of a stormwater discharge through a municipal separate storm sewer system, the municipal operator of the system;

(iv) In the case of a stormwater discharge located within a public drinking water supply watershed or aquifer area, the water company responsible for that water supply.

DO NOT SUBMIT any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

(c) Monitoring Requirements

The primary requirements for monitoring turbidity are summarized in the table below:

Table 1

Area of Soil Disturbance	*Monitoring Required?*	*Monitoring Frequency*	*Sample Method*
Sites which disturb 1 acre or more, but less than 5 acres	Only IF a Registration is required	Monthly IF a Registration is required	Procedure consistent with 40 CFR Part 136
Sites which disturb 5 acres or more	Yes	Monthly	Procedure consistent with 40 CFR Part 136

(1) Turbidity Monitoring Requirements

(A) Monitoring Frequency

(i) Sampling shall be conducted in accordance with Table 1, above, at least once every month, when there is a discharge of stormwater from the site while construction activity is ongoing, until final stabilization of the drainage area associated with each outfall is achieved.

(ii) The permittee is only required to take samples during normal working hours as defined in Section 2. The site's normal working hours must be identified in the Plan pursuant to Section 5(*b*)(1)(B)(vii). If sampling is discontinued due to the end of normal working hours, the permittee shall resume sampling the following morning or the morning of the next working day following a weekend or holiday, as long as the discharge continues.

(iii) Sampling may be temporarily suspended any time conditions exist that may reasonably pose a threat to the safety of the person taking the sample. Such conditions may include high winds, lightning, impinging wave or tidal activity, intense rainfall or other

hazardous condition. Once the unsafe condition is no longer present, sampling shall resume.

(iv) If there is no stormwater discharge during a month, sampling is not required.

(B) Sample Collection

(i) All samples shall be collected from discharges resulting from a storm event that occurs at least 24 hours after any previous storm event generating a stormwater discharge. Any sample containing snow or ice melt must be identified on the Stormwater Monitoring Report form. Sampling of snow or ice melt in the absence of a storm event is not a valid sample.

(ii) Samples shall be grab samples taken *at least* three separate times during a storm event and shall be *representative* of the flow and characteristics of the discharge(s). Samples may be taken manually or by an in-situ turbidity probe or other automatic sampling device equipped to take individual turbidity readings (i.e. not composite). The first sample shall be taken within the first hour of stormwater discharge from the site. In cases where samples are collected manually and the discharge begins outside of normal working hours, the first sample shall be taken at the start of normal working hours.

(C) Sampling Locations

(i) Sampling is required of all point source discharges of stormwater from disturbed areas except as may be modified for linear projects under subparagraph (ii) below. Where there are two or more discharge points that discharge substantially identical runoff, based on similarities of the exposed soils, slope, and type of stormwater controls used, a sample may be taken from just one of the discharge points. In such case, the permittee shall report that the results also apply to the substantially identical discharge point(s). No more than 5 substantially identical outfalls may be identified for one representative discharge. If such project is planned to continue for more than one year, the permittee shall rotate twice per year the location where samples are taken so that a different discharge point is sampled every six months. The Plan must identify each outfall authorized by this permit and describe the rationale for any substantially identical outfall determinations.

(ii) Linear Projects

For a linear project, as defined in Section 2, the protocols of subparagraph (i), above, shall apply except that up to 10 substantially identical outfalls may be identified for one representative discharge.

(iii) All sampling point(s) shall be identified in the Plan and be clearly marked in the field with a flag, stake, or other visible marker.

(D) Sampling and analysis shall be prescribed by 40 CFR Part 136.

(E) Turbidity Values

The stormwater discharge turbidity value for each sampling point shall be determined by taking the average of the turbidity values of all samples taken at that sampling point during a given storm.

(2) Stormwater Monitoring Reports

(A) Within thirty (30) days following the end of each month, permittees shall enter the stormwater sampling result(s) on the Stormwater Monitoring Report (SMR) form (available at www.ct.gov/deep/stormwater) and submit it in accordance with the NetDMR provisions in subsection F, below, or, if the permittee has opted out of NetDMR, to the following address:

Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division (Attn: DMR Processing)
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(B) If there was no discharge during any given monitoring period, the permittee shall submit the form as required with the words "no discharge" entered in place of the monitoring results.

(C) If the permittee monitors any discharge more frequently than required by this general permit, the results of this monitoring shall be included in additional SMRs for the month in which the samples were collected.

(D) If sampling protocols are modified due to the limitations of normal working hours or unsafe conditions in accordance with Section 5(c)(1)(A)(ii) or (iii) above, a description of and reason for the modifications shall be included with the SMR.

(E) If the permittee samples a discharge that is representative of two or more substantially identical discharge points, the permittee shall include the names or locations of the other discharge points.

(F) NetDMR Reporting Requirements

(i) Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit stormwater monitoring reports through a secure internet connection. Unless otherwise approved in writing by the commissioner, no later than one-hundred and eighty (180) days after the issuance of this permit the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

(a) Submittal of NetDMR Subscriber Agreement

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department at deep.netdmr@ct.gov and initiate the NetDMR subscription process for electronic submission of Stormwater Monitoring Report information. Information on NetDMR is available on the Department's website at www.ct.gov/deep/netdmr. On or before ninety (90) days after issuance of this permit the Permittee shall submit a signed and notarized copy of the *Connecticut DEEP NetDMR Subscriber Agreement* to the Department.

(b) Submittal of Reports Using NetDMR

Unless otherwise approved by the commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit SMRs required under this permit to the Department using NetDMR in satisfaction of the SMR submission requirements of Sections 5(*c*)(2)(A) of this permit.

SMRs shall be submitted electronically to the Department no later than the 30th day of the month following the completed reporting period. Any additional monitoring conducted in accordance with 40 CFR 136 shall be submitted to the Department as an electronic attachment to the SMR in NetDMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of SMRs to the Department. NetDMR is accessed from: http://www.epa.gov/netdmr.

(c) Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting SMRs, the commissioner may approve the submission of SMRs in hard copy form ("opt-out request"). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date a Permittee would be required under this permit to begin filing SMRs using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department's approval and shall thereupon expire. At such time, SMRs shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at deep.netdmr@ct.gov:

Attn: NetDMR Coordinator
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(d) Reporting and Record Keeping Requirements

(1) For a period of at least five years from the date that construction is complete, the permittee shall retain copies of the Plan and all reports required by this general permit, and records of all data used to complete the registration for this general permit, unless the commissioner specifies another time period in writing. Inspection records must be retained as part of the Plan for a period of five (5) years after the date of inspection.

(2) The permittee shall retain an updated copy of the Plan required by this general permit at the construction site from the date construction is initiated at the site until the date construction at the site is completed.

(e) Regulations of Connecticut State Agencies Incorporated into this General Permit

The permittee shall comply with sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein.

(f) Reliance on Registration

In evaluating the registrant's registration, the commissioner has relied on information provided by the registrant. If such information proves to be false or incomplete, any authorization reliant on such information may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

(g) Duty to Correct and Report Violations

Upon learning of a violation of a condition of this general permit, unless otherwise specified in this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct and mitigate the results of such violation, prevent further such violation, and report in writing such violation and such corrective action to the commissioner within five (5) days of the permittee's learning of such violation. Such information shall be filed in accordance with the "Certification of Documents" section (Section 5(*i*)) of this general permit.

(h) Duty to Provide Information

If the commissioner requests any information pertinent to the construction activity or to compliance with this general permit or with the permittee's authorization under this general permit, the permittee shall provide such information within fifteen (15) days of such request or other time period as may be specified in writing by the commissioner. Such information shall be filed in accordance with the "Certification of Documents" section (Section 5(*i*)) of this general permit.

(i) Certification of Documents

Unless otherwise specified in this general permit, any document, including but not limited to any notice, information or report, which is submitted to the commissioner under this general permit shall be signed by the permittee, or a duly authorized representative of the permittee, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

(j) Date of Filing

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word "day" as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

(k) False Statements

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes.

(l) Correction of Inaccuracies

Within fifteen (15) days after the date a permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be filed in accordance with the certification requirements prescribed in Section 5(*i*) of this general permit.

(m) Transfer of Authorization

Any authorization issued by the commissioner under this general permit is transferable only in accordance with the provisions of section 22a-6o of the General Statutes. Any person or municipality proposing to transfer any such authorization shall submit a license transfer form to the commissioner. The transferee is not authorized to conduct any activities under this general permit until the transfer is approved by the commissioner (typically 30 days). The transferee may adopt by reference the Plan developed by the transferor. The transferee shall amend the Plan as required by the "Keeping Plans Current" Section 5(b)(5) of this general permit).

(n) Reopener

At such time as the USEPA may institute a new rule for post-construction stormwater management or modify the requirements for their National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities (CGP) to institute a numeric Effluent Limitation Guideline (ELG) for turbidity in stormwater discharges from construction activities, the commissioner may reopen this general permit pursuant to the Section 40 Part 122.62(a) of the Code of Federal Regulations for implementation of these elements.

(o) Other Applicable Law

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

(p) Other Rights

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or construction activity affected by such general permit. In conducting any construction activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

Section 6. Termination Requirements

(a) Notice of Termination

At the completion of a construction project registered pursuant to the "Registration Requirements" section (Section 4) of this general permit, a Notice of Termination must be filed with the commissioner. A project shall be considered complete after all post-construction measures are installed, cleaned and functioning and the site has been stabilized for at least three months following the cessation of construction activities. A site is considered stabilized when there is no active erosion or sedimentation present and no disturbed areas remain exposed **for all phases**.

(1) Post-Construction Inspection

For locally approvable projects, once all post-construction stormwater measures have been installed in accordance with the Post-Construction Stormwater Management section (subsection 5(*b*)(2)(C)) and cleaned of any construction sediment or debris, the registrant shall contact the appropriate Conservation District or a qualified soil erosion and sediment control professional and/or a qualified professional engineer, as appropriate, who will inspect the site to confirm compliance with these post-construction stormwater measures. This person(s) shall not be an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the permittee and shall have no ownership interest of any kind in the project for which the site's registration was submitted.

(2) Final Stabilization Inspection

For all projects, once the site has been stabilized for at least three months, the registrant shall have the site inspected by a qualified inspector to confirm final stabilization. The registrant shall indicate compliance with this requirement on the Notice of Termination form.

(b) Termination Form

A termination notice shall be filed on forms prescribed and provided by the commissioner and shall include the following:

(1) The permit number as provided to the permittee on the permit certificate.

(2) The name of the registrant as reported on the general permit registration form (DEEP-PED-REG-015).

(3) The address of the completed construction site.

(4) The dates when:

(A) All storm drainage structures were cleaned of construction debris pursuant to the "Other Controls" section (subsection 5(*b*)(2)(D)) of this general permit; and

(B) The post-construction inspection was conducted pursuant to subsection 6(*a*)(1), above; and

(C) The date of completion of construction; and

(D) The date of the final stabilization inspection pursuant to subsection 6(*a*)(2), above.

(5) A description of the post-construction activities at the site.

(6) Signatures of:

(A) The permittee; and

(B) The person certifying the post-construction inspection pursuant to subsection 6(*a*)(1), above.

(c) Where to File a Termination Form

A termination form shall be filed with the commissioner at the following address:

CENTRAL PERMITS PROCESSING UNIT
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Section 7. Commissioner's Powers

(a) Abatement of Violations

The commissioner may take any action provided by law to abate a violation of this general permit, including but not limited to penalties of up to $25,000 per violation per day under Chapter 446k of the Connecticut General Statutes, for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

(b) General Permit Revocation, Suspension, or Modification

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

(c) Filing of an Individual Permit Application

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit if he wishes to continue lawfully conducting the construction activity, the permittee shall file an application for an individual permit within thirty (30) days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall continue to comply with the terms and conditions of this general permit. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued: August 21, 2013

Daniel C. Esty
Commissioner

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX A

Endangered and Threatened Species

In order to be eligible for coverage under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities ("GP" or "the GP"), under section 3(*b*)(2) of the GP, a registrant must ensure that the construction activity, which includes, but is not limited to, excavation, site development or other ground disturbance activities, and stormwater flow, discharges and control measures ("construction activity"), does not threaten the continued existence of any state or federal species listed as endangered or threatened ("listed species") or result in the destruction or adverse modification of any habitat associated with such species.

In order to prevent significant, unforeseen delays in the processing of a registration under the GP, registrants should assess compliance with section 3(*b*)(2) early in the planning stages of a project. The Department of Energy and Environmental Protection ("the Department") strongly recommends that this assessment *be initiated up to one year, or more,* prior to the projected construction initiation date, and even before the purchase of the site of the construction activity. At a minimum, registrants must assess compliance with section 3(*b*)(2) prior to submission of the Registration Form for the GP.

This Appendix describes the ways that a registrant can comply with section 3(*b*)(2) of the GP. In connection with the filing of a registration a registrant can perform a self-assessment described in Section 1, seek a limited one-year determination or a safe harbor determination from the Department's Wildlife Division under Sections 2 or 3, respectively, or stipulate in writing to the presence of listed species or any habitat associated with such species and develop a mitigation plan pursuant to Section 5 of this Appendix. While some means of compliance are more limited than others, the options set out in this Appendix are not mutually exclusive and all options remain available to a registrant. For example, a registrant may perform a self-assessment under Section 1 and seek a safe harbor determination under Section 3 of this Appendix. Provided the requirements of this Appendix are met, the choice of how to proceed is the registrant's.

Section 1. Self Assessment through Natural Diversity Database Map Review and Screening

Before submission of a registration for coverage under this GP, a registrant must review the current versions of the Department's Natural Diversity Data Base ("NDDB") maps. Except as provided for in Sections 2, 3 or 5 of this Appendix, such review must occur no more than six months before such submission. Such review provides a method for screening whether the Department is already aware of listed species that may be present on the site of the construction activity. These maps can be viewed at the following locations:

1. Online at the following links:

   CT DEEP Natural Diversity Data Base Maps
   CTECO Webpage (in the interactive Simple Map Viewer)

2. At the DEEP Public File Room at 79 Elm Street in Hartford.

Screening

The site of the construction activity must be compared to the shaded areas depicted on the NDDB map to determine if the site is entirely, partially, or within ¼ mile of a shaded area. If the site is entirely, partially or within a ¼ mile of a shaded area for a listed species a registrant can only achieve compliance with section 3(*b*)(2) of the GP by obtaining a limited one-year determination under Section 2, a safe harbor determination under Section 3, or an approved mitigation plan under Section 5 of this Appendix from the Department's Wildlife Division.

If the site of the construction activity is not entirely, partially or within ¼ mile of a shaded area, then the Department is not aware of any listed species at the site of the construction activity. Based upon this screening, and provided the registrant has no reasonably available verifiable, scientific or other credible information that the construction activity could reasonably be expected to violate section 3(b)(2) of the GP, when completing the Registration Form for this GP a registrant may check the box that indicates that the construction activity will not impact federal or state listed species.

A registrant using only self-assessment under this section may utilize the results of any such self assessment for up to, but no more than, six months from the date of such assessment. Note, however, that the NDDB maps are not the result of comprehensive state-wide field investigations, but rather serve as a screening tool. Using such maps as a screening tool does not provide a registrant with an assurance that listed species or their associated habitat may not be encountered at the site of the construction activity. Notwithstanding the NDDB screening results, if a listed species is encountered at the site of the construction activity, the registrant shall promptly contact the Department and may need to take additional action to ensure that the registrant does not violate section 3(b)(2) of the GP.

Section 2. Obtaining a Limited One-Year Determination

A registrant may seek a written determination from the Department's Wildlife Division, good for one-year, that the proposed construction activity complies with section 3(b)(2) of the GP. To obtain this limited one-year determination, a registrant must, in addition to conducting the NDDB map review in Section 1 of this Appendix, provide the Department's Wildlife Division with (1) any reasonably available verifiable, scientific or other credible information about whether the construction activity could reasonably be expected to result in a violation of section 3(b)(2) of the GP, and (2) limited information about the site of the proposed construction activity, but less information than would be necessary for a safe harbor determination under Section 3 of this Appendix. The limited information necessary for a one-year determination is on the current "Request for Natural Diversity Database (NDDB) State Listed Species Review" form on the Department's website. The form and instructions for seeking such a limited one-year determination are available at www.ct.gov/DEEP/nddbrequest.

Provided the registrant's information is accurate and the Department's Wildlife Division determines that the construction activity will not violate section 3(b)(2) of the GP, the registrant shall receive a limited one-year determination from the Department. Any such determination may indicate that the construction activity will not impact listed species or their associated habitat, or it may include specific conditions to be implemented to avoid or significantly minimize any impacts that may be encountered at the site of the construction activity. For purposes of submitting a registration for the GP, any such limited one-year determination can be relied upon by the person receiving such determination for one-year from the date of such determination. Like, however, the NDDB screening procedure in Section 1 of this Appendix, a limited one-year determination does not provide a registrant with an assurance that listed species or their associated habitat may not be encountered at the site of the construction activity. If a listed species is encountered, the registrant shall promptly contact the Department

and may need to take additional action to ensure that the construction activity does not violate section 3(b)(2) of the GP.

If a registrant receives a limited one-year determination from the Department, the registrant should check the limited one-year determination box on the GP registration form and include the Department's one-year limited determination letter if requested on the GP Registration form. Checking the limited one-year determination box on the registration form and failing to provide the determination letter from the Department's Wildlife Division, if requested on the GP Registration form, will delay and may prevent processing of a registration.

If based upon the information provided by a registrant seeking a limited one-year determination the Department's Wildlife Division determines that the construction activity could impact listed species or their associated habitat, or that the Department needs additional information to make a limited one-year determination, the registrant may still achieve compliance with section 3(b)(2) of the GP through providing additional information pursuant to Section 4 or developing a mitigation plan pursuant to Section 5 of this Appendix.

A registrant may request one or more one-year extensions to a limited one-year determination under this section. If the Department's Wildlife Division has prescribed a form for requesting an extension, any such request shall be made using the prescribed form. There is a presumption that requests for a one-year extension of a limited one-year determination shall be granted. However, this presumption can be rebutted if the Department determines that a change in any of the following has occurred since an initial limited one-year determination or any extension was granted: the construction activity affecting or potentially affecting listed species or their associated habitat; the NDDB maps for the site of the construction activity; the limited information upon which a limited one-year determination or any extension was granted; or other information indicative of a change in circumstance affecting listed species or their associated habitat. Any one-year extension granted under this paragraph shall run from the date the Department's Wildlife Division issues its determination to grant an extension and shall be treated as a limited one-year determination as provided for in this section. Any letter granting a one-year extension shall be included with a registration along with the original limited one-year determination as provided for in this section.

Section 3. Obtaining a Safe Harbor Determination

A registrant may seek a written determination from the Department's Wildlife Division, good for three years, with the potential to be extended for an additional year, that proposed construction activity complies with section 3(b)(2) of the GP. Any such determination shall constitute a "safe harbor" for purposes of section 3(b)(2) of the GP.

To obtain a safe harbor determination, a registrant must, in addition to conducting the NDDB review in section 1 of this Appendix, provide the Department's Wildlife Division with any reasonably available verifiable, scientific or other credible information about whether the construction activity could reasonably be expected to result in a violation of section 3(b)(2) of the GP and specific information about the site of the construction activity. The specific information necessary for a safe harbor determination is listed in Attachment A to this Appendix. This information must be sufficient to allow the Wildlife Division to adequately assess the site for potential risks to listed species and their associated habitat. While the Department recognizes certain information is necessary to make a safe harbor determination, it also recognizes that a registrant may need to obtain a safe harbor determination early in its project's approval process in order to make prudent business decisions about purchasing a site or proceeding to final project designs. The form and instructions for seeking a safe harbor determination are available at www.ct.gov/DEEP/nddbrequest.

Provided the registrant's information is accurate and the Department's Wildlife Division determines that the construction activity will not violate section 3(b)(2) of the GP, the registrant shall receive a safe harbor determination from the Department. A safe harbor determination may indicate that the construction activity will not impact listed species or their associated habitat, or it may include specific conditions to be implemented to avoid or significantly minimize any impacts that may be encountered at the site of the construction activity. The Department shall honor the safe harbor determination for three years from the date it is issued, meaning that unlike the NDDB review in Section 1 or the limited one-year determination in Section 2 of this Appendix, if the Department makes a safe harbor determination and a registrant remains in compliance with any conditions in any such determination, irrespective of what may be found at the site of the construction activity, a registrant shall be considered in compliance with section 3(b)(2) of the GP. However, a safe harbor determination shall not be effective if a construction activity may threaten the continued existence of any federally listed species or its critical habitat under federal law. If a federally listed species or its critical habitat is encountered on the site of the construction activity, the registrant shall promptly contact the Department and may need to take additional action to ensure that the construction activity does not violate federal law or section 3(b)(2) of the GP.

If a registrant receives a safe harbor determination from the Department, the registrant should check the safe harbor determination box on the GP registration form and include the Department's safe harbor determination if requested on the GP Registration form. Checking the safe harbor box on the registration form and failing to provide the safe harbor determination letter from the Department's Wildlife Division, if requested on the GP Registration form, will delay and may prevent processing of a registration.

If based upon the information provided by a registrant seeking a safe harbor determination the Department's Wildlife Division determines that the construction activity could impact listed species or their associated habitat, or that the Department needs additional information to make a safe harbor determination, the registrant may still achieve compliance with section 3(b)(2) of the GP through providing additional information pursuant to Section 4 or developing a mitigation plan pursuant to Section 5 of this Appendix.

If a registrant receives a safe harbor determination from the Department's Wildlife Division, anytime during the third year of such safe harbor, a registrant may request a one-year extension of that safe harbor. If the Department's Wildlife Division has prescribed a form for requesting an extension, any such request shall be made using the prescribed form. There is a presumption that a request for a one-year extension of a safe harbor shall be granted. However, this presumption can be rebutted if the Department determines that a change in any of the following has occurred since the safe harbor was granted: the construction activity affecting or potentially affecting listed species or their associated habitat; the NDDB maps for the site of the construction activity; the information upon which the safe harbor was granted; or other information indicative of a change in circumstance affecting listed species or their associated habitat. A registrant may seek only one extension, for one-year, to a safe harbor determination. Any one-year extension granted under this paragraph shall run from the date of the Department's Wildlife Division issues its determination to grant an extension and shall be honored by the Department in the same manner as a safe harbor determination noted above. Any letter granting a one-year extension shall be included with a registration along with the original limited safe harbor determination as provided for in this section.

Section 4. Providing Additional Information

For the Department's Wildlife Division to make a limited one-year determination under Section 2 or a safe harbor determination under section 3 of this Appendix, limited additional information may be required to determine if the construction activity would impact listed species or their associated habitat. If the species in question is a state listed endangered or threatened species under section 26-306 of the general statutes, a registrant shall, in consultation with the Department's Wildlife Division, provide the limited additional

information requested by the Department's Wildlife Division. Such information may include, but is not limited to, a survey of specific listed species in question. If the species in question is a federally listed threatened or endangered species, in addition to the Department's Wildlife Division, a registrant shall also consult with the U.S. Fish and Wildlife Service and shall provide any additional information requested by that agency. A registrant that initially sought or obtained a limited one-year determination may, after providing the additional information required under this section request a safe harbor determination under Section 3 of this Appendix.

At any time, as an alternative to proceeding under Section 2, 3 or 4 of this Appendix, a registrant may stipulate, in writing, to the presence of one or more listed species or their associated habitat. A registrant choosing this alternative shall proceed to develop a mitigation plan under Section 5 of this Appendix.

If based upon any additional information provided to the Department's Wildlife Division, and as applicable, the U.S. Fish & Wildlife Service, the Department's Wildlife division determines that construction activity will be in compliance with section 3(b)(2) of the GP, a registrant shall receive a limited one-year determination under Section 2 or a safe harbor determination under Section 3 of this Appendix, as applicable.

If the Department's Wildlife Division determines that additional information is necessary to determine if the construction activity has the potential to impact listed species or their associated habitat, and a registrant chooses to not provide such information, a registrant shall proceed with the self assessment through an NDDB review under Section 1 of this Appendix, or stipulate to the existence of a listed species or associated habitat and develop a mitigation plan under Section 5 or such registrant shall not be eligible to register under the GP.

Section 5. Developing a Mitigation Plan

The Department's Wildlife Division may determine that the construction activity has the potential to adversely impact listed species or their associated habitat. However, it may be possible to modify the construction activity or undertake certain on-site measures to avoid or significantly minimize such impacts. If the species or associated habitat in question is a state listed endangered or threatened species under section 26-306 of the general statutes, a registrant shall consult with the Department's Wildlife Division to determine if an acceptable mitigation plan can be developed so impacts can be avoided or minimized such that a registrant remains in compliance with section 3(b)(2). If the species in question is a federally listed threatened or endangered species, any such consultation shall also include the U.S. Fish and Wildlife Service.

If a registrant in consultation with the Department's Wildlife Division, and as applicable, the U.S. Fish & Wildlife Service, develops a mitigation plan that is approved by the Department's Wildlife Division, or as applicable, the U.S. Fish & Wildlife Service, the registrant shall receive a limited one-year determination under Section 2 or a safe harbor determination under Section 3 of this Appendix. In this situation, in addition to checking the one-year determination box or the safe harbor determination box, as applicable, on the registration form, the registrant shall also check the box on the registration form indicating that it has an approved mitigation plan and provide a status update on the registration form as to whether it has completed or is still in the process of implementing the approved mitigation plan.

If an approved mitigation plan has not been fully implemented by the time a registration is submitted, completing all remaining tasks in the plan shall become an enforceable condition of any registration issued to the registrant.

If the Department determines that the construction activity has the potential to adversely impact listed species or their associated habitat and the registrant and the Department, and as applicable, the U.S. Fish & Wildlife Service, are not able to agree on an acceptable mitigation plan that is approved by the Department, and as applicable, the U.S. Fish & Wildlife Service, any such registrant shall not be eligible to register under the GP.

APPENDIX A
ATTACHMENT A

Specific Information Needed to Apply for a Safe Harbor Determination

A Safe Harbor Determination will be made upon the submission of a detailed report that fully addresses the matters noted below. For the Department's Wildlife Division to make a safe harbor determination, the report should synthesize and analyze this information, not simply compile information. Those providing synthesis and analysis need appropriate qualifications and experience. A request for a safe harbor determination shall include:

1) Habitat Information, including GIS mapping overlays, identifying:

- wetlands, including wetland cover types;
- plant community types;
- topography;
- soils;
- bedrock geology;
- floodplains, if any;
- land use history; and
- water quality classifications/criteria.

2) Photographs - The report should also include photographs of the site, including all reasonably available aerial or satellite photographs and an analysis of such photographs.

3) Inspection - The report should include a visual inspection(s) of the site, preferably when the ground is visible. This inspection can also be helpful in confirming or further evaluating the items noted above.

4) Biological Surveys - The report should include all biological surveys of the site where construction activity will take place that are reasonably available to a registrant. A registrant shall notify the Department's Wildlife Division of biological studies of the site where construction activity will take place that a registrant is aware of but are not reasonably available to the registrant.

5) Based on items #1 through 4 above, the report shall include a Natural Resources Inventory of the site of the construction activity. This inventory should also include a review of reasonably available scientific literature and any recommendations for minimizing adverse impacts from the proposed construction activity on listed species or their associated habitat.

6) In addition, to the extent the following is available at the time a safe harbor determination is requested, a request for a safe harbor determination shall include and assess:

- Information on Site Disturbance Estimates/Site Alteration information

- Vehicular Use

- Construction Activity Phasing Schedules, if any; and

- Alternation of Drainage Patterns

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX B

Connecticut Department of Energy & Environmental Protection
Inland Water Resources Division Fact Sheet
Considering Low Impact Development Principles in Site Design

In order to reduce the impact of development and address stormwater quality issues, the Department strongly encourages the use of Low Impact Development (LID) measures. LID is a site design strategy intended to maintain or replicate predevelopment hydrology through the use of small-scale controls, integrated throughout the site, to manage stormwater runoff as close to its source as possible. Infiltration of stormwater through LID helps to remove sediments, nutrients, heavy metals, and other types of pollutants from runoff.

Key Strategies for LID

Key strategies for effective LID include: infiltrating, filtering, and storing as much stormwater as feasible, managing stormwater close to where the rain/snow falls, managing stormwater at multiple locations throughout the landscape, conserving and restoring natural vegetation and soils, preserving open space and minimizing land disturbance, designing the site to minimize impervious surfaces, and providing for maintenance and education. Water quality and quantity benefits are maximized when multiple techniques are grouped together. In areas of compacted and/or possibly contaminated soils, soil suitability should be further investigated prior to selecting optimum treatment and/or remediation measures. Where soil conditions permit, the DEEP encourages the utilization of one, or a combination of, the following measures:

- the use of pervious pavement or grid pavers (which are very compatible for parking lot and fire lane applications), or impervious pavement without curbs or with notched curbs to direct runoff to properly designed and installed infiltration areas;
- the use of vegetated swales, tree box filters, and/or infiltration islands to infiltrate and treat stormwater runoff (from building roofs, roads, and parking lots);
- the minimization of access road widths and parking lot areas to the maximum extent possible to reduce the area of impervious surface;
- the use of dry wells to manage runoff from building roofs;
- incorporation of proper physical barriers or operational procedures for special activity areas where pollutants could potentially be released (e.g. loading docks, maintenance and service areas, dumpsters, etc.);
- the installation of rainwater harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation (i.e. - rain barrels for residential use and cisterns for larger developments);
- the use of residential rain gardens to manage runoff from roofs and driveways;
- the use of vegetated roofs (green roofs) to detain, absorb, and reduce the volume of roof runoff; and
- providing for pollution prevention measures to reduce the introduction of pollutants to the environment.

The 2004 Stormwater Quality Manual LID Appendix and the 2002 Erosion and Sediment Control Guidelines LID Appendix both provide guidance on implementing LID measures. A guide to LID resources can also be found in the DEEP Low Impact Development Resources Factsheet (PDF).

LID in Urban Areas

If the proposed site is located in a highly urbanized area, it is likely underlain by urban land complex soils. The Natural Resources Conservation Service (NRCS) Soil Web Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm) provides information on soil textures, parent materials, slopes, height of seasonal high water table, depth to restrictive layer, and permeability. In highly developed areas, infiltration may be limited due to the high percentage of impervious cover. However, infiltration practices may be suitable at urban sites depending on:

- Potential contamination of soils in historically industrialized areas. The siting of areas for infiltration must consider any existing soil or groundwater contamination.

- Site specific soil conditions. NRCS mapping consists of a minimum 3 acres map unit and soils may vary substantially within each mapping unit. Test pits should be dug in areas
- planned for infiltration practices to verify soil suitability and/or limitations.

- Investigation of areas of compacted soils and the utilization of proper construction staging. Planning should insure that areas to be used for infiltration are not compacted during the construction process by vehicles or machinery.

Even if infiltration is limited at a site, it is still possible to implement LID practices. Specifically, potential exists for the installation of green roofs on buildings and/or the use of cisterns to capture and reuse rainwater.

LID in Areas with a High Seasonal Water Table or Hardpan Layer

- The impact of stormwater runoff to any streams and/or wetlands near the site should be considered. Water quality treatment is influenced by hydraulic conductivity and time of travel. If stormwater infiltration is limited by an impermeable layer close to the surface, the water may run laterally through the ground and discharge to the stream or wetlands, providing limited water quality treatment. However, a longer time of travel may provide sufficient treatment. Proper soil testing for infiltration potential will increase the likelihood of successful BMP design.

- In areas with a high seasonal water table, bioretention areas/rain gardens should be planted with water tolerant/wetland plants. The presence of a high seasonal water table suggests that water may drain slowly or not at all during certain parts of the year. Planting native wetland vegetation will help to ensure plant survival and increase the effectiveness of bioretention practices. Information on native plantings that are both drought tolerant and tolerant of wet conditions can be found in The UConn Cooperative Extension System's guide to building a rain garden at http://nemo.uconn.edu/publications/rain_garden_broch.pdf. Native plant lists for Connecticut can also be found at http://www.fhwa.dot.gov/environment/rdsduse/ct.htm.

LID Guidance for Federal Projects

- LID techniques have been utilized by Department of Defense (DoD) agencies during the last several years. The effectiveness of these projects in managing runoff as well as reducing construction and maintenance costs has created significant interest in LID. The DoD has created a Unified Facilities Criteria document, Low Impact Development that provides guidelines for integrating LID planning and design into a facility's regulatory and resource protection programs. It is available on-line at: http://www.wbdg.org/ccb/DOD/UFC/ufc_3_210_10.pdf.

- Section 438 of the Energy Independence and Security Act (EISA) of 2007 requires federal agencies to reduce stormwater runoff from federal development projects to protect water resources. In December 2009, the EPA developed a technical guidance document on implementing the stormwater runoff requirements for federal projects under Section 438 of EISA. The document contains guidance on how compliance with Section 438 can be achieved, measured and evaluated and can be found at: http://www.epa.gov/owow/NPS/lid/section438/pdf/final_sec438_eisa.pdf.

For more information contact the CT DEEP Watershed Management/Low Impact Development Program:

Name	Area	Telephone
MaryAnn Nusom Haverstock	Program Oversight/ Low Impact Development	(860) 424-3347
Chris Malik	Watershed Manager	(860) 424-3959
Susan Peterson	Watershed Manager	(860) 424-3854
Eric Thomas	Watershed Manager	(860) 424-3548

List of Runoff Reduction/LID Practices

Re-Forestation
Disconnection of Rooftop Runoff
Disconnection of Non-Rooftop Runoff
Sheetflow to Conservation Areas
Green Roof
Permeable Pavement
Rainwater Harvesting
Submerged Gravel Wetlands
Micro-Infiltration
Rain Gardens
Bioretention
Landscape Infiltration
Grass Swales
Bio-swales
Wet Swales
Stormwater Ponds
Stormwater Wetlands
Stormwater Filtering Systems
Stormwater Infiltration

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX C

AQUIFER PROTECTION AREAS AND OTHER GROUNDWATER DRINKING SUPPLY AREAS GUIDANCE INFORMATION

The Pollution Control Plan ("the Plan") should consider measures to reduce or mitigate potential impacts to both ground water (aquifers) and surface waters, taking into consideration both quantity and quality of the runoff. The emphasis should be to minimize, to the extent possible, changes between pre-development and post-development runoff rates and volumes.

The basic stormwater principals for Aquifer Protection Areas (and other groundwater drinking supply areas) are to prevent inadvertent pollution discharges/releases to the ground, while encouraging recharge of stormwater where it does not endanger groundwater quality. Measures include:

- prevent illicit discharges to storm water, including fuel/chemical pollution releases to the ground;
- minimize impervious coverage and disconnect large impervious areas with natural or landscape areas;
- direct paved surface runoff to aboveground type land treatment structures – sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground;
- provide necessary impervious pavement in high potential pollutant release areas. These "storm water hot spots" include certain land use types or storage and loading areas, fueling areas, intensive parking areas and roadways (see table below);
- only use subsurface recharge structures such as dry wells, galleries, or leaching trenches, to directly infiltrate clean runoff such as rooftops, or other clean surfaces. These structures do not adequately allow for attenuation of salts, solvents, fuels or other soluble compounds in groundwater that may be contained in runoff; and
- restrict pavement deicing chemicals, or use an environmentally suitable substitute such as sand only, or alternative de-icing agents such as calcium chloride or calcium magnesium.

Infiltration of stormwater should be **restricted** under the following site conditions:

- ***Land Uses or Activities with Potential for Higher Pollutant Loads:*** Infiltration of stormwater from these land uses or activities (refer to Table 7-5 below), also referred to as stormwater "hotspots," can contaminate public and private groundwater supplies. Infiltration of stormwater from these land uses or activities may be allowed by the review authority with appropriate pretreatment. Pretreatment could consist of one or a combination of the primary or secondary treatment practices described in the Stormwater Quality Manual provided that the treatment practice is designed to remove the stormwater contaminants of concern.

- ***Subsurface Contamination:*** Infiltration of stormwater in areas with soil or groundwater contamination such as brownfield sites and urban redevelopment areas can mobilize contaminants.

- ***Groundwater Supply and Wellhead Areas:*** Infiltration of stormwater can potentially contaminate groundwater drinking water supplies in immediate public drinking water wellhead areas.

Land Uses or Activities with Potential for Higher Pollutant Loads
Table 7-5 of the 2004 Stormwater Quality Manual

Land Use/Activities	
• Industrial facilities subject to the DEEP Industrial Stormwater General Permit or the U.S. EPA National Pollution Discharge Elimination System (NPDES) Stormwater Permit Program • Vehicle salvage yards and recycling facilities • Vehicle fueling facilities (gas stations and other facilities with on-site vehicle fueling) • Vehicle service, maintenance, and equipment cleaning facilities • Fleet storage areas (cars, buses, trucks, public works) • Commercial parking lots with high intensity use (shopping malls, fast food restaurants, convenience stores, supermarkets, etc.) • Public works storage areas	• Road salt storage facilities (if exposed to rainfall) • Commercial nurseries • Flat metal rooftops of industrial facilities • Facilities with outdoor storage and loading/unloading of hazardous substances or materials, regardless of the primary land use of the facility or development • Facilities subject to chemical inventory reporting under Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA), if materials or containers are exposed to rainfall • Marinas (service and maintenance) • Other land uses and activities as designated by the review authority

For further information regarding the design of stormwater collection systems in Aquifer Protection Areas, contact the Aquifer Protection Area Program at (860) 424-3020 or visit www.ct.gov/deep/aquiferprotection.

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX D

Coastal Management Act Determination Form

For sites within the Coastal Boundary, please attach this form and written approval from the local governing authority (or verification of exemption) to the Registration Form for the Discharge of Stormwater and Dewatering Wastewaters From Construction Activities.

SITE INFORMATION

Future Permittee _____

Mailing Address _____

Business Phone _____ ext.: _____ Fax: _____

Contact Person _____ Title: _____

Site Name _____

Site Address/ Location _____

Site Latitude and Longitude _____

Receiving Water (name, basin) _____

Project Description _____

_____

STATEMENT OF REVIEW:

The above referenced project is consistent with the goals and policies in section 22a-92 of the Connecticut General Statutes and will not cause adverse impacts to coastal resources as defined in section 22a-93(15) of the Connecticut General Statutes.

Date of Coastal Site Plan Approval: _____

☐ Copy of written approval attached, or

☐ Verification of exemption attached

APPENDIX E
(Exhibit 3 of District/DEEP Memorandum of Agreement)

Conservation Districts of Connecticut
Regional Delineations and Contact Information

Northwest Conservation District
1185 New Litchfield Street
Torrington, CT 06790
Ph: 860-626-7222
Fax: 860-626-7222
Email: ncd@conservect.org

Eastern Connecticut Conservation District
238 West Town Street
Norwich, CT 06360-2111
Ph**:** 860-887-4163 x 400 Fax**:** 860-887-4082
Email: kate.johnson.eccd@comcast.net

Connecticut River Coastal Conservation District, Inc.
deKoven House Community Center
27 Washington Street
Middletown, CT 06457
Ph: 860-346-3282 Fax: 860-346-3284
Email: ctrivercoastal@conservect.org

Southwest Conservation District
51 Mill Pond Road
Hamden, CT 06514
Ph: 203-287-8179 Fax: 203-288-5077
Email: swcd43@sbcglobal.net

North Central Conservation District
24 Hyde Avenue
Vernon, CT 06066
Ph: 860-875-3881 Fax: 860-870-8973
Email: tollandc@snet.net

NORTHWEST	SOUTHWEST	NORTH CENTRAL	CT RIVER COASTAL	EASTERN
Barkhamsted	Ansonia	Avon	Berlin	Andover
Bethel	Beacon Falls	Bloomfield	Chester	Ashford
Bethlehem	Bethany	Bolton	Clinton	Bozrah
Bridgewater	Branford	Bristol	Colchester	Brooklyn
Brookfield	Bridgeport	Burlington	Cromwell	Canterbury
Canaan	Cheshire	Canton	Deep River	Chaplin
Colebrook	Darien	Coventry	Durham	Columbia
Cornwall	Derby	East Granby	East Haddam	Eastford
Danbury	East Haven	East Hartford	East Hampton	East Lyme
Goshen	Easton	East Windsor	Essex	Franklin
Hartland	Fairfield	Ellington	Haddam	Griswold
Harwinton	Greenwich	Enfield	Hebron	Groton
Kent	Guilford	Farmington	Killingworth	Hampton
Litchfield	Hamden	Glastonbury	Lyme	Killingly
Morris	Meriden	Granby	Madison	Lebanon
New Fairfield	Middlebury	Hartford	Marlborough	Ledyard
New Hartford	Milford	Manchester	Middlefield	Lisbon
New Milford	Monroe	Plainville	Middletown	Mansfield
Newtown	Naugatuck	Simsbury	Newington	Montville
Norfolk	New Canaan	Somers	New Britain	New
North Canaan	New Haven	South Windsor	Old Lyme	London
Plymouth	North Branford	Stafford	Old Saybrook	North
Roxbury	North Haven	Suffield	Portland	Stonington
Salisbury	Norwalk	Tolland	Rocky Hill	Norwich
Sharon	Orange	Vernon	Salem	Plainfield
Sherman	Oxford	West Hartford	Westbrook	Pomfret
Southbury	Prospect	Wethersfield		Preston
Thomaston	Redding	Willington		Putnam
Torrington	Ridgefield	Windsor		Scotland
Warren	Seymour	Windsor Locks		Sprague
Washington	Shelton			Sterling
Watertown	Southington			Stonington
Winchester	Stamford			Thompson
Woodbury	Stratford			Union
	Trumbull			Voluntown
	Wallingford			Waterford
	Waterbury			Windham
	West Haven			Woodstock
	Weston			
	Westport			
	Wilton			
	Wolcott			
	Woodbridge			

APPENDIX F

Memorandum of Agreement
Between
The Connecticut Department of Energy & Environmental Protection
and the
Conservation Districts of Connecticut

WHEREAS, the Commissioner of the Department of Energy and Environmental Protection ("Department" or "DEEP ") is authorized by section 22a-6(2)(3) and (4) of the Connecticut General Statutes ("CGS") to enter into this Agreement; and

WHEREAS, the five Conservation Districts of Connecticut (collectively, the "Districts"), are not-for-profit corporations duly authorized, organized and existing under the laws of the State of Connecticut and are authorized by section 22a-315 of the CGS and section 22a-315-14 of the Regulations of Connecticut State Agencies to enter into this Agreement; and

WHEREAS, section 22a-430b of the Connecticut General Statutes requires the Department to regulate stormwater discharges from construction activities under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities ("the Construction General Permit" or "CGP"), which has been or shall be issued on October 1, 2013. The Construction General Permit requires the implementation of erosion and sedimentation controls to control the discharge of sediment from construction and post-construction discharges; and

WHEREAS, Construction General Permits require the preparation and implementation of a Stormwater Pollution Control Plan ("Plan" or "SWPCP") to prevent erosion and the discharge of sediment to the waters of the state; and

WHEREAS, pursuant to section 22a-315 of the CGS, soil and water conservation districts and boards were established to advise the Commissioner on matters of soil and water conservation and erosion and sedimentation control and to assist the Commissioner in implementing programs related to soil and water conservation and erosion and sediment control; and

WHEREAS, pursuant to section 22a-315 of the CGS, the soil and water conservation districts and boards may receive funds from private sources for services provided to promote soil and water conservation and to assist the Commissioner in the implementation of related programs; and

WHEREAS, section 22a-326 of the CGS declares the policy of the state "to strengthen and extend its erosion and sediment control activities and programs and to establish and implement, through the Council on Soil and Water Conservation, soil and water conservation districts, the municipalities and the Commissioner of Energy and Environmental Protection, a state-wide coordinated erosion and sediment control program which shall reduce the danger from storm water runoff, minimize nonpoint sediment pollution from land being developed and conserve and protect the land, water, air and other environmental resources of the state;" and

WHEREAS, the Districts have understanding and experience in reviewing erosion and sediment control plans because of their longstanding participation in the municipal approval process, as required by section 22a-329 of the CGS; and

WHEREAS, DEEP and the Districts are jointly dedicated to protecting the waters of the state by controlling the discharge of sediment and the pollution resulting from stormwater runoff.

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter stated, the Parties agree as follows:

I. RESPONSIBILITIES OF THE CONSERVATION DISTRICTS.

For locally approvable projects, as defined in the Construction General Permit, with five (5) or more acres of soil disturbance, the appropriate District (as specified in Appendix E of the Construction General Permit, appended hereto as Exhibit 3) shall review Stormwater Pollution Control Plans submitted to the District in accordance with Section 3(*b*)(10) of the CGP, shall determine whether each such SWPCP is consistent with the requirements of the CGP, and shall advise the Commissioner in writing of its determination regarding the SWPCP's consistency.

A. Components of the SWPCP Review by the Districts

1. Requirements for Conducting a Review:

(a) SWPCP review shall be conducted by a District representative having one or more of the following minimum qualifications: (i) a bachelor's degree in hydrology, engineering (agricultural, civil, environmental, or chemical), landscape architecture, geology, soil science, environmental science, natural resources management, or a related field and two years of professional and field experience, or (ii) the EnviroCert International, Inc. designation as a Certified Professional in Erosion and Sediment Control, or a Certified Professional in Storm Water Quality.

(b) All SWPCP reviews undertaken by a District shall be conducted in accordance with the guidelines and procedures established by DEEP in consultation with the Districts, as further described below, and shall include at least one inspection, and no more than 3 inspections, of the project site.

(c) The District shall begin a SWPCP review upon the receipt of the all of following: the developer's request for review, two copies of the proposed SWPCP, the payment of required fee in the amount specified in Exhibit 1 and the written permission of the developer to enter onto and inspect the project site. Once the District is in receipt of all the documents and the fee as delineated above, the developer's SWPCP shall be considered submitted to the District.

2. Determinations of Consistency by the District after Review of the SWPCP and Subsequent Procedures

(a) If the District determines the developer's SWPCP is:

(i) Consistent with the requirements of the Construction General Permit, the District shall issue an affirmative determination notice to both the developer or such developer's designee and to DEEP in order to advise them of the adequacy of the SWPCP. The District shall also provide a copy of the SWPCP to DEEP if requested by the Commissioner.

(ii) Not consistent with the requirements of the Construction General Permit, the District shall provide a written notice of such inconsistency to the developer or such developer's designee; such notice shall include a list of the SWPCP's deficiencies and any appropriate explanatory comments.

(b) If the developer's SWPCP is found to be inconsistent with the CGP, the developer may revise the SWPCP (the "Revised SWPCP") to address any deficiencies noted by the District and resubmit its Revised SWPCP to the District for review.

(c) If the District receives a Revised SWPCP in accordance with subsection (b) above, the District shall perform a review of the Revised SWPCP. If the Revised SWPCP is deemed:

(i) Consistent with the requirements of the Construction General Permit, the District shall (1) issue an affirmative determination notice to both the project developer or such project developer's designee and to DEEP to advise them of the adequacy of the SWPCP and (2) provide a copy of the SWPCP to the DEEP if requested by the Commissioner; or

(ii) Not consistent with the requirements of the CGP after this review, the District shall provide a written notice of such inconsistency to the developer or such developer's designee. This notice shall include a list of all remaining SWPCP deficiencies and any explanatory comments as appropriate.

(d) In the event the District determines after review of the Revised SWPCP in accordance with subsection (c), above, that the Revised SWPCP remains inconsistent with the requirements of the Construction General Permit, and the developer resubmits its Revised SWPCP *within 180 calendar days* of the District's original determination of inconsistency, the resubmitted Revised SWPCP shall be considered a Resubmission. As such, the resubmitted Revised SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the Resubmission Fee in Exhibit 1.

(e) In the event the District determines after review of the Revised SWPCP in accordance with subsection (c), above, that the Revised SWPCP remains inconsistent with the requirements of the Construction General Permit, and the developer resubmits its Revised SWPCP *more than 180 calendar days after* the District's original determination of inconsistency, the resubmitted Revised SWPCP shall be considered a new submission. The newly submitted Revised SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the SWPCP Review Fee in Exhibit 1.

(f) Revisions to a SWPCP subsequent to the District's prior approval of developer's SWPCP

(i) In the event the developer revises a SWPCP after the District has determined that the developer's SWPCP, prior to this revision, was consistent with the requirements of the Construction General Permit, and the developer submits the revised SWPCP to the District for review *within 180 calendar days* of the District's original determination of consistency, the SWPCP shall be considered a Post-Approval Resubmission. As a Post-Approval Resubmission, the SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the Post-Approval Resubmission Fee in Exhibit 1.

(ii) In the event the developer revises a SWPCP after the District has determined that the developer's SWPCP, prior to this revision, was consistent with the requirements of the Construction General Permit, and the developer submits the revised SWPCP to the District for review *more than 180 calendar days after* the District's original determination of consistency, the SWPCP shall be considered a new submission. The newly submitted SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the SWPCP Review Fee in Exhibit 1.

B. Plan Review Timeframes

1. The District shall review a new submission of a SWPCP submitted by a developer or such developer's designee and provide review comments within thirty (30) calendar days of the date of a complete submission as specified in Section I.A.1.(c).

2. If the District identifies deficiencies in the SWPCP, the District shall allow the developer or such developer's designee the opportunity to revise their SWPCP and resubmit it to the District within fifteen (15) calendar days after the date of mailing or delivery of the District's written comments to the developer or such developer's designee.

3. The District shall review any SWPCP revised in accordance with subsection I.B.2., above, and provide a written determination of the SWPCP's consistency or inconsistency within fifteen (15) calendar days after the submission of the revised SWPCP.

4. At the request of the District or the developer and with the agreement of both the District and the developer, the deadlines stated in subsections 1. – 3., above, may be extended. However, any such extensions shall be limited to no more than double the original amount of time allowed above for the relevant action.

5. Express review of a SWPCP may be requested by a developer. However, the Districts shall have complete discretion to accept or decline such request for an express review based on the District's circumstances, including, but not limited to: their existing workload, vacation schedules and staffing. If a District grants an express review, the timeframe shall be reduced to no more than one third of the timeframes noted in subsection 1. – 3., above, and the fee shall be in accordance with the Express Reviews fee in Exhibit 1.

6. In the event a District does not complete the review of the SWPCP within sixty (60) days (or within the time allowed under any authorized extension pursuant to subsection B.4, above, but in no circumstance later than 120 days) of the date the SWPCP was initially submitted to the District, and provided such delay is not the result of the developer's or such developer's designee's failure to address SWPCP deficiencies as noted in subsection B.2, above, the District shall:

(a) not later than three (3) days after the District's deadline, notify the DEEP that the developer shall be initiating the registration process for the Construction General Permit in accordance with section I.B of this Agreement, for completion of the SWPCP review, and;

(b) provide to the DEEP, upon request, the District's complete file, including supporting documentation the developer's SWPCP consistency determination, including, but not limited to, the SWPCP, any other documentation submitted to the District by or on behalf of a developer, and any analysis already performed by the District; and

(c) not later than seven (7) days after the District's deadline, in accordance with section I.B of this Agreement, for completion of the SWPCP review, transfer to the DEEP, up to a maximum of $4,500, the fees that were originally submitted by the developer.

C. Inspections of the Project Site

1. Prior to the commencement of project construction and during the course of the SWPCP review process, the District shall conduct at least one inspection of the project site.

2. Once the construction of the project has begun, a District shall make at least one, but not more than three, inspection(s) of the project site to verify that the developer's SWPCP is being

implemented as approved by the District. A District shall report the results of the inspection(s) to the developer or such developer's designee and to DEEP in a manner prescribed by the Commissioner.

3. Upon notification from the developer or developer's designee, in accordance with Section 6(a)(1) of the CGP, that construction of the stormwater collection and management system is complete, the District shall conduct one inspection of the project site to verify that the post-construction stormwater management measures were completed in accordance with the approved SWPCP. The District shall report the results of this inspection to DEEP in a manner prescribed by the Commissioner.

D. Audits

The District agrees that all records pertaining to this Agreement shall be maintained for a period of not less than five (5) years. Such records shall be made available to the DEEP and to the state auditors upon request. For the purposes of this Agreement, "Records" are all working papers and such information and materials as may have been accumulated by the District in performing the Agreement, including, but not limited to, documents, data, analysis, plans, books, computations, drawings, specifications, notes, reports, records, estimates, summaries and correspondence, kept or stored in any form.

II. FEE SCHEDULE.

A. A District may assess fees for the services it renders in conjunction with its SWPCP reviews. Such fees shall be paid as follows:

1. All fees, except those described in subsection II.A.2, below, shall be submitted by the developer to the District with the developer's request for review. These fees are non refundable.

2. The fee for Post-Approval Resubmission, as designated in Exhibit 1, shall be submitted by the developer to the District upon completion of the District's review, prior to release of the determination notice, and is non refundable.

B. The Fee Schedule shall be reviewed annually by the Parties. The Fee Schedule may be adjusted as warranted, without a formal amendment to this Agreement, by mutual agreement between the Districts and the Commissioner.

III. RESPONSIBILITIES OF DEEP.

A. In accordance with the Construction General Permit requirements for SWPCP reviews by a third party, DEEP shall conduct outreach to inform the development community that a District may review SWPCPs for consistency with the requirements of the Construction General Permit. DEEP shall also inform the development community that a registration form for authorization under the Construction General Permit may only be submitted to DEEP if: the District, or other third party in accordance with Section 3(b)(11) of the CGP, determines that the SWPCP is consistent with the requirements of the CGP, or in the event the time schedule is exceeded for a District review as described in section I.B.6, above.

B. In order to institute standard SWPCP review guidelines and procedures, DEEP shall coordinate with the Districts to prepare a SWPCP checklist. The standard review guidelines and procedures established shall be consistent with the requirements of the Construction General Permit, the 2002 CT Guidelines for Soil Erosion and Sedimentation Control, and the 2004 Stormwater Quality Manual. The Commissioner shall have final approval of the review guidelines and procedures.

C. DEEP shall provide initial training regarding SWPCP requirements for District staff involved in SWPCP reviews. The frequency of subsequent training shall be determined by the Commissioner.

D. DEEP shall retain final decision making authority regarding the determination that a SWPCP is or is not consistent with the requirements of the Construction General Permit and shall oversee the permitting process for Construction General Permit coverage.

E. Once a SWPCP has been approved, DEEP shall oversee any subsequent compliance and/or enforcement matters related to a developer's adherence to the requirements of the Construction General Permit.

F. DEEP shall have the discretion to review any of the Districts' records pertaining to any aspect this Agreement.

IV. POINTS OF CONTACT.

The following shall be points of contact for this Agreement unless otherwise agreed to by all Parties, notwithstanding section VI. All notices, demands, requests, consents, approvals or other communications required or permitted to be given or which are given with respect to this Agreement (for the purpose of this section collectively called "Notices") shall be deemed to have been effected at such time as the notice is placed in the U.S. mail, first class and postage prepaid, return receipt requested, or, placed with a recognized, overnight express delivery service that provides for a return receipt. All such Notices shall be in writing and shall be addressed as follows:

A. DEEP
Director
Water Permitting & Enforcement Division
Bureau of Material Management & Compliance Assurance
Department of Energy & Environmental Protection
79 Elm St.
Hartford, CT 06106
Phone: 860-424-3018
Fax: 860-424-4074

B. Conservation District
Board Chairperson
Address & Phone of appropriate District:

Northwest Conservation District
1185 New Litchfield Street
Torrington, CT 06790
Ph: 860-626-7222
Fax: 860-626-7222
Email: ncd@conservect.org

Eastern Connecticut Conservation District
238 West Town Street
Norwich, CT 06360-2111
Ph**:** 860-887-4163 x 400 Fax**:** 860-887-4082
Email: kate.johnson.eccd@comcast.net

Connecticut River Coastal Conservation District, Inc.
deKoven House Community Center
27 Washington Street
Middletown, CT 06457
Ph: 860-346-3282 Fax 860-346-3284
Email: ctrivercoastal@conservect.org

Southwest Conservation District
51 Mill Pond Road
Hamden, CT 06514
Ph: 203-287-8179 Fax: 203-288-5077
Email: swcd43@sbcglobal.net

North Central Conservation District
24 Hyde Avenue
Vernon, CT 06066
Ph: 860-875-3881 Fax: 860-870-8973
Email: tollandc@snet.net

V. EXECUTIVE ORDERS AND ANTI-DISCRIMINATION. The Districts shall comply with the additional terms and conditions hereto attached as Exhibit 2.

VI. AMENDMENTS. Either the DEEP or the Districts may recommend revisions to this Agreement as circumstances may warrant; however, any revisions must be upon mutual agreement of DEEP and all five Conservation Districts. Unless otherwise stated in this Agreement, formal written amendment is required for changes to any of the terms and conditions specifically stated in the Agreement, including Exhibit 2 of the Agreement, any prior amendments to the Agreement, and any other Agreement revisions determined material by the Department.

VII. SEVERABILITY. The provisions of this Agreement are severable. If any part of it is found unenforceable, all other provisions shall remain fully valid and enforceable, unless the unenforceable provision is an essential element of the bargain.

VIII. SOVEREIGN IMMUNITY. The Parties acknowledge and agree that nothing in the Agreement shall be construed as a modification, compromise or waiver by the State of any rights or defenses of any immunities provided by federal law or the laws of the State of Connecticut to the State or any of the State's, which they may have had, now have or shall have with respect to all matters arising out of the Agreement. To the extent that this section conflicts with any other section, this section shall govern.

IX. FORUM AND CHOICE OF LAW. The Agreement shall be deemed to have been made in the City of Hartford, State of Connecticut. Both Parties agree that it is fair and reasonable for the validity and construction of the Agreement to be, and it shall be, governed by the laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of laws. To the extent that any immunities provided by federal law or the laws of the State of Connecticut do not bar an action against the State or the Districts, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be transferred to any other court, provided, however, that nothing here constitutes a waiver or compromise of the sovereign immunity of the State of Connecticut. The Districts waive any objection which they may now have or shall have to the laying of venue of any Claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

X. TERMINATION. Notwithstanding any provisions in this Agreement, DEEP, through a duly

authorized employee, may terminate the Agreement whenever the Agency makes a written determination that such Termination is in the best interests of the State. The Agency shall notify the Districts in writing sent by certified mail, return receipt requested, which notice shall specify the effective date of Termination and the extent to which the Districts must complete its Performance under the Agreement prior to such date; or (b) The Districts may terminate the Agreement for good cause. The Districts shall notify DEEP by written notice at least one hundred eighty (180) days prior to the effective date of termination. In order for the Districts to terminate this Agreement, (1) there must be a consensus between all five Conservation Districts that each District shall be terminating this Agreement with the DEEP; (2) such proof of consensus shall be submitted to the DEEP in the form of a letter signed by the duly authorized agent for each District by certified mail, return receipt requested, at least one hundred eighty (180) days prior to the Districts' intention to cancel or terminate. Upon the Termination of this Agreement by either Party, the Districts shall deliver to the Agency copies of all Records no later than thirty (30) days after the Termination of the Agreement, or fifteen (15) days after the Non-terminating Party receives a written request from the Terminating Party for the Records. The Districts shall deliver those Records that exist in electronic, magnetic or other intangible form in a non-proprietary format, such as, but not limited to, PDF, ASCII or .TXT. Upon receipt of a written notice of Termination from the Agency, the Districts shall cease operations as the Agency directs in the notice, and take all actions that are necessary or appropriate, or that the Agency may reasonably direct, for the protection, and preservation of records. Except for any work which the Agency directs the Districts to Perform in the notice prior to the effective date of Termination, and except as otherwise provided in the notice, the Districts shall terminate or conclude all existing subcontracts and purchase orders and shall not enter into any further subcontracts, purchase orders or commitments. Upon Termination of the Agreement, all rights and obligations shall be null and void, so that no Party shall have any further rights or obligations to any other Party, except with respect to the sections which survive Termination. All representations, warranties, agreements and rights of the Parties under the Agreement shall survive such Termination to the extent not otherwise limited in the Agreement and without each one of them having to be specifically mentioned in the Agreement. Termination of the Agreement pursuant to this section shall not be deemed to be a breach of Agreement by the Agency.

XI. DURATION OF AGREEMENT. This Agreement shall be effective on July 1, 2013 or on the date of the last signature below, whichever is later, and shall continue in force unless canceled or terminated by either party in accordance with paragraph X above.

XII. VOID AB INITIO. Notwithstanding paragraphs X and XI, the Agreement shall be void *ab initio* if the Construction General Permit is reissued, revoked or modified to eliminate the need for the Districts to review the SWPCP pursuant to such general permit's terms and conditions or if the Construction General Permit expires and is not reissued.

XIII. INTERPRETATION. The Agreement contains numerous references to statutes and regulations. For purposes of interpretation, conflict resolution and otherwise, the content of those statutes and regulations shall govern over the content of the reference in the Agreement to those statutes and regulations.

XIV. ENTIRETY OF AGREEMENT. This Agreement is the entire agreement between the Parties with respect to its subject matter, and supersedes all prior agreements, proposals, offers, counteroffers and understandings of the Parties, whether written or oral. The Agreement has been entered into after full investigation, neither Party relying upon any statement or representation by the other unless such statement or representation is specifically embodied in the Agreement.

XV. PROTECTION OF STATE CONFIDENTIAL INFORMATION. *(mandatory language required for all PSAs effective 12/1/11)*

A. The Districts or District Parties, at their own expense, have a duty to and shall protect from a

Confidential Information Breach any and all Confidential Information which they come to possess or control, wherever and however stored or maintained, in a commercially reasonable manner in accordance with current industry standards.

B. Each District or District Party shall develop, implement and maintain a comprehensive data-security program for the protection of Confidential Information. The safeguards contained in such program shall be consistent with and comply with the safeguards for protection of Confidential Information, and information of a similar character, as set forth in all applicable federal and state law and written policy of the Department or State concerning the confidentiality of Confidential Information. Such data-security program shall include, but not be limited to, the following:

1. A security policy for employees related to the storage, access and transportation of data containing Confidential Information;

2. Reasonable restrictions on access to records containing Confidential Information, including access to any locked storage where such records are kept;

3. A process for reviewing policies and security measures at least annually;

4. Creating secure access controls to Confidential Information, including but not limited to passwords; and

5. Encrypting of Confidential Information that is stored on laptops, portable devices or being transmitted electronically.

C. The District and District Parties shall notify the Department and the Connecticut Office of the Attorney General as soon as practical, but no later than twenty-four (24) hours, after they become aware of or suspect that any Confidential Information which Parties have come to possess or control has been subject to a Confidential Information Breach. If a Confidential Information Breach has occurred, the District shall, within three (3) business days after the notification, present a credit monitoring and protection plan to the Commissioner of Administrative Services, the Department and the Connecticut Office of the Attorney General, for review and approval. Such credit monitoring or protection plan shall be made available by the District at its own cost and expense to all individuals affected by the Confidential Information Breach. Such credit monitoring or protection plan shall include, but is not limited to, reimbursement for the cost of placing and lifting one (1) security freeze per credit file pursuant to Connecticut General Statutes §36a-701a. Such credit monitoring or protection plans shall be approved by the State in accordance with this Section and shall cover a length of time commensurate with the circumstances of the Confidential Information Breach. The District's costs and expenses for the credit monitoring and protection plan shall not be recoverable from the Department, any State of Connecticut entity or any affected individuals.

D. The District shall incorporate the requirements of this Section in all subAgreements requiring each District Party to safeguard Confidential Information in the same manner as provided for in this Section.

E. Nothing in this Section shall supersede in any manner the District's and/ or the District Parties' obligations pursuant to HIPAA or the provisions of this Agreement concerning the obligations of the District as a Business Associate of the Department.

XVI. AMERICANS WITH DISABILITIES ACT *(Mandatory)*. The Districts shall be and remain in compliance with the Americans with Disabilities Act of 1990 ("Act"), to the extent applicable, during the term of the Agreement. The DEEP may cancel the Agreement if the District and District Parties fail to comply with the Act.

XVII. ADA PUBLICATION STATEMENT. The following statement shall be incorporated into all **publications** prepared under the terms of this Agreement:

"The Department of Energy and Environmental Protection is an affirmative action/equal opportunity employer and service provider. In conformance with the Americans with Disabilities Act, DEEP makes every effort to provide equally effective services for persons with disabilities. Individuals with disabilities who need this information in an alternative format, to allow them to benefit and/or participate in the agency's programs and services, should call DEEP's Human Resources Office at (860) 424-3006, send a fax to (860) 424-3896, or email DEEP.MedRecs@ct.gov. Persons who are hearing impaired should call the State of Connecticut relay number 711."

When advertising any **public meetings** conducted under the terms of this Agreement, the above publications language should be used as well as the following statement:

"Requests for accommodations must be made at least two weeks prior to the program date."

All **videos** produced under the terms of this Agreement must be made available with closed captioning.

XVIII. PUBLICATION OF MATERIALS. The District must obtain written approval from the State of Connecticut prior to distribution or publication of any printed material prepared under the terms of this Agreement. Unless specifically authorized in writing by the State, on a case by case basis, the District shall have no right to use, and shall not use, the name of the State of Connecticut, its officials, agencies, or employees or the seal of the State of Connecticut or its agencies: (1) in any advertising, publicity, promotion; or (2) to express or to imply any endorsement of District's products or services; or (3) to use the name of the State of Connecticut, its officials agencies, or employees or the seal of the State of Connecticut or its agencies in any other manner (whether or not similar to uses prohibited by (1) and (2) above), except only to manufacture and deliver in accordance with this Agreement such items as are hereby contracted for by the State. In no event may the Districts use the State Seal in any way without the express written consent of the Secretary of State.

XIX. CHANGES IN PRINCIPAL PROJECT STAFF. Any changes in the principal project staff must be requested in writing and approved in writing by the Commissioner at the Commissioner's sole discretion. In the event of any unapproved change in principal project staff, the Commissioner may, in the Commissioner's sole discretion, terminate this Agreement.

XX. FURTHER ASSURANCES. The Parties shall provide such information, execute and deliver any instruments and documents and take such other actions as may be necessary or reasonably requested by the other Party which are not inconsistent with the provisions of this Agreement and which do not involve the vesting of rights or assumption of obligations other than those provided for in the Agreement, in order to give full effect to the Agreement and to carry out the intent of the Agreement.

XXI. ASSIGNMENT. The Districts shall not assign any of their rights or obligations under the Agreement, voluntarily or otherwise, in any manner without the prior written consent of the Agency. The Agency may void any purported assignment in violation of this section and declare the District in breach of this Agreement. Any termination by the Agency for a breach is without prejudice to the Agency's or the State's rights or possible Claims.

XXII. EXHIBITS. All exhibits referred to in, and attached to, this Agreement are incorporated in this Agreement by such reference and shall be deemed to be a part of it as if they had been fully set forth in it.

XXIII. FORCE MAJEUR. Events that materially affect the cost of the Goods or Services or the time schedule within which to Perform and are outside the control of the party asserting that such an event has

occurred, including, but not limited to, labor troubles unrelated to District(s), failure of or inadequate permanent power, unavoidable casualties, fire not caused by a District, extraordinary weather conditions, disasters, riots, acts of God, insurrection or war.

XXIV. INDEMNIFICATION. The Districts shall indemnify, defend and hold harmless the State and its officers, representatives, agents, servants, employees, successors and assigns from and against any and all (1) Claims arising, directly or indirectly, in connection with the Agreement, including the acts of commission or omission (collectively, the "Acts") of the District or District Parties; and (2) liabilities, damages, losses, costs and expenses, including but not limited to, attorneys' and other professionals' fees, arising, directly or indirectly, in connection with Claims, Acts or the Agreement. The Districts obligations under this section to indemnify, defend and hold harmless against Claims includes Claims concerning confidentiality of any part of or all of the Districts' Records, any intellectual property rights, other proprietary rights of any person or entity, copyrighted or uncopyrighted compositions, secret processes, patented or unpatented inventions, articles or appliances furnished or used in the Performance. The Districts shall not be responsible for indemnifying or holding the State harmless from any liability arising due to the negligence of the State or any other person or entity acting under the direct control or supervision of the State. The Districts shall reimburse the State for any and all damages to the real or personal property of the State caused by the Acts of the Districts or any District Parties. The State shall give the Districts reasonable notice of any such Claims. The Districts shall carry and maintain at all times during the term of the Agreement, and during the time that any provisions survive the term of the Agreement, sufficient general liability insurance to satisfy its obligations under this Agreement. The Districts shall name the State as an additional insured on the policy and shall provide a copy of the policy to the Agency prior to the effective date of the Agreement. The Districts shall not begin Performance until the delivery of the policy to the Agency. The Agency shall be entitled to recover under the insurance policy even if a body of competent jurisdiction determines that the Agency or the State is contributorily negligent. This section shall survive the Termination of the Agreement and shall not be limited by reason of any insurance coverage.

XXV. DISTRICT PARTIES. A District's members, directors, officers, shareholders, partners, managers, principal officers, representatives, agents, servants, consultants, employees or any one of them or any other person or entity with whom the District is in privity of oral or written contract and the District intends for such other person or entity to Perform under the Agreement in any capacity

XXVI. CAMPAIGN CONTRIBUTION RESTRICTION. For all State contracts as defined in P.A. 07-1 having a value in a calendar year of $50,000 or more or a combination or series of such agreements or contracts having a value of $100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See SEEC Form 11.

Authorizing Signatures

For DEEP: _____ 8/21/13
Commissioner — Date

For Northwest Conservation District: _____ 6/5/13
Signature — Date

Chairman
Title

For Eastern Connecticut Conservation District: _____ 6/12/13
Signature — Date

Chair
Title

For Connecticut River Coastal Conservation District, Inc.: _____ 5/22/13
Signature — Date

Chair
Title

For Southwest Conservation District: _____ 5/13/13
Signature — Date

Vice-Chairperson SWCD
Title

For North Central Conservation District: John M Collins 5/23/13
Signature — Date

Chairman
Title

EXHIBIT 1

Connecticut Conservation District
Stormwater Pollution Control Plan Review Fee Schedule

Single Family Residential Developments Disturbing 5 or more Acres

Number of Lots	Standard Fee
1	$1,500
2	$1,665
3	$1,830
4	$1,995
5	$2,160
6	$2,325
7	$2,490
8	$2,655
9	$2,820
10	$2,985
11	$3,150
12	$3,315
13	$3,480
14	$3,645
15	$3,810
16	$3,975
17	$4,140
18	$4,305
19	$4,470
20	$4,635
21	$4,800
22	$4,965
23	$5,130
24	$5,295
25	$5,460

Number of Lots	Standard Fee
26	$5,625
27	$5,790
28	$5,955
29	$6,120
30	$6,285
31	$6,450
32	$6,615
33	$6,780
34	$6,945
35	$7,110
36	$7,275
37	$7,440
38	$7,605
39	$7,770
40	$7,935
41	$8,100
42	$8,265
43	$8,430
44	$8,595
45	$8,760
46	$8,925
47	$9,090
48	$9,255
49	$9,420
50	$9,585

Over 50 lots:
$9,585 + $20 x number of lots over 50

SW PCP Review: Standard Fee (as shown above)

Resubmission: Standard Fee minus 50%

Post-Approval Resubmission: $85 per hour, up to a maximum of the Standard Fee minus 50%

Express Reviews: The specified fee for an SW PCP Review, a Resubmission, or a Post-Approval Resubmission; plus 50% of the applicable fee and/or limit

Policies:

1. Payment due upon submission of SW PCP, with the exception of Post-Approval Resubmissions.
2. Payment for Post-Approval Resubmission review is due upon completion of review.
3. Written permission to enter onto and inspect the site: Due upon submission of SW PCP.

EXHIBIT 1

Connecticut Conservation District
Stormwater Pollution Control Plan Review Fee Schedule

Commercial and Multi Family Developments

Number of Disturbed Acres	Standard Fee
5	$2,200
6	$2,365
7	$2,530
8	$2,695
9	$2,860
10	$3,025
11	$3,190
12	$3,355
13	$3,520
14	$3,685
15	$3,850
16	$4,015
17	$4,180
18	$4,345
19	$4,510
20	$4,675
21	$4,840
22	$5,005
23	$5,170
24	$5,335
25	$5,500
26	$5,665
27	$5,830

Number of Disturbed Acres	Standard Fee
28	$5,995
29	$6,160
30	$6,325
31	$6,490
32	$6,655
33	$6,820
34	$6,985
35	$7,150
36	$7,315
37	$7,480
38	$7,645
39	$7,810
40	$7,975
41	$8,140
42	$8,305
43	$8,470
44	$8,635
45	$8,800
46	$8,965
47	$9,130
48	$9,295
49	$9,460
50	$9,625

Over 50 acres:
$9,625 + $25 x number of disturbed acres over 50

SW PCP Review: Standard Fee (as shown above)

Resubmission: Standard Fee minus 50%

Post-Approval Resubmission: $85 per hour, up to a maximum of the Standard Fee minus 50%

Express Reviews: The specified fee for an SW PCP Review, a Resubmission, or a Post-Approval Resubmission; plus 50% of the applicable fee and/or limit

Policies:

1. Payment due upon submission of SW PCP, with the exception of Post-Approval Resubmissions.
2. Payment for Post-Approval Resubmission review is due upon completion of review.
3. Written permission to enter onto and inspect the site: Due upon submission of SW PCP.

EXHIBIT 2

EXECUTIVE ORDERS

The Agreement is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the Contract as if they had been fully set forth in it. At the Districts' request, the Client Agency shall provide a copy of these orders to the Districts. The Agreement may also be subject to Executive Order No. 7C of Governor M. Jodi Rell, promulgated July 13, 2006, concerning contracting reforms and Executive Order No. 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services, in accordance with their respective terms and conditions.

NONDISCRIMINATION

(a) For purposes of this Section, the following terms are defined as follows:

i. "Commission" means the Commission on Human Rights and Opportunities;
ii. "Contract" and "contract" include any extension or modification of this Agreement or contract;
iii. "Districts" and "districts" include the Districts and any successors or assigns of the Districts or districts;
iv. "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose.
v. "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;
vi. "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;
vii. "marital status" means being single, married as recognized by the State of Connecticut, widowed, separated or divorced;
viii. "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;
ix. "minority business enterprise" means any small contractor, District or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of Connecticut General Statutes § 32-9n; and
x. "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each District is (1) a political subdivision of the state, including, but not limited to, a municipality, (2) a quasi-public agency, as defined in Conn. Gen. Stat. Section 1-120, (3) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in Conn. Gen. Stat. Section 1-267, (4) the federal government, (5) a foreign government, or (6) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), (4) or (5).

(b) (1) The Districts agree and warrant that in the performance of the Agreement such Districts will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Districts that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Districts further agree to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Districts that such disability prevents performance of the work involved; (2) the Districts agree, in all solicitations or advertisements for employees placed by or on behalf of the Districts, to state that it is

an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Districts agree to provide each labor union or representative of workers with which the Districts have a collective bargaining Agreement or other contract or understanding and each vendor with which the Districts have a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Districts' commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Districts agree to comply with each provision of this Section and Connecticut General Statutes §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes §§ 46a-56, 46a-68e and 46a-68f; and (5) the Districts agree to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Districts as relate to the provisions of this Section and Connecticut General Statutes § 46a-56. If the contract is a public works contract, the Districts agree and warrant that they will make good faith efforts to employ minority business enterprises as Districts and suppliers of materials on such public works projects.

(c) Determination of the Districts' good faith efforts shall include, but shall not be limited to, the following factors: The Districts' employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.

(d) The Districts shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.

(e) The Districts shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on the Districts, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Districts shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes §46a-56; provided if such Districts become involved in, or is threatened with, litigation with the Districts or vendor as a result of such direction by the Commission, the Districts may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

(f) The Districts agree to comply with the regulations referred to in this Section as they exist on the date of this Agreement and as they may be adopted or amended from time to time during the term of this Agreement and any amendments thereto.

(g) (1) The Districts agree and warrant that in the performance of the Agreement such Districts will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Districts agree to provide each labor union or representative of workers with which such Districts have a collective bargaining Agreement or other contract or understanding and each vendor with which such Districts have a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Districts' commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Districts agree to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes § 46a-56; and (4) the Districts agree to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Districts which relate to the provisions of this Section and Connecticut General Statutes § 46a-56.

(h) The Districts shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on the Districts, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Districts shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided, if such Districts become involved in, or is threatened with, litigation with the Districts or vendor as a result of such direction by the Commission, the Districts may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to the Connecticut Department of Energy and Environmental Protection (DEEP)."

Note: *Place on official Letterhead. Need to document registered name with CT Secretary of State C.O.N.C.O.R.D.*

CERTIFICATION

I, xxxxxxxxxxxxxxx, Chair of the xxxxxxxxxxxxxxx an entity lawfully organized and existing under the laws of Connecticut, do hereby certify that the following is a true and correct copy of a resolution adopted on the >>>>day of >>>>, 2011, by the governing body of the xxxxxx in accordance with all of its documents of governance and management and the laws of Connecticut and further certify that such resolution has not been modified, rescinded or revoked, and is a present in full force and effect.

RESOLVED: That the xxxxxxxxxxxx hereby adopts as its policy to support the nondiscrimination agreements and warranties required under Conn. Gen. Stat. § 4a-60(a)(1) and § 4a-60a(a)(1), as amended in State of Connecticut Public Act 07-245 and sections 9(a)(1) and 10(a)(1) of Public Act 07-142, as those statutes may be amended from time to time.

IN WITNESS WHEREOF, the undersigned has executed this certificate this >>>day of >>>>>, 2013.

_____

Signature

_____

Date

CONSERVATION DISTRICT PLAN REVIEW CERTIFICATION

Registrations submitted to DEEP for which a Conservation District has performed the Plan review pursuant to Section 3(*b*)(10) of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities shall include the following certification:

"I hereby certify that I am an employee of the [INSERT NAME OF DISTRICT] Conservation District and that I meet the qualifications to review Stormwater Pollution Control Plans as specified in the Memorandum of Agreement between the Connecticut Department of Energy & Environmental Protection and the Connecticut Conservation Districts. I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify, based on my review of the requirements of such general permit and on the standard of care for such projects, that the Plan is in compliance with the requirements of the general permit. I understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Registrations submitted to DEEP for which the District review was begun but ***could not be completed*** within the time limits specified in the Memorandum of Agreement shall include the following statement:

"I hereby certify that I am an employee of the [INSERT NAME OF DISTRICT] Conservation District and that I meet the qualifications to review Stormwater Pollution Control Plans as specified in the Memorandum of Agreement between the Connecticut Department of Energy & Environmental Protection and the Connecticut Conservation Districts. I am making this statement in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I hereby state that the review of the Stormwater Pollution Control Plan (Plan) for such registration was not completed within the time frames specified in the Memorandum of Agreement. Consequently, I cannot certify that the Plan is in compliance with the requirements of the general permit."

General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities

APPENDIX G

Historic Preservation Review

Pursuant to Chapter 184a, Section 10-387 of the Connecticut General Statutes, the Department of Energy & Environmental Protection (DEEP) shall review, in consultation with the Connecticut Commission on Culture and Tourism, its policies and practices for consistency with the preservation and study of CT's archaeological and historical sites. Pursuant to this requirement, DEEP has outlined the following process for assessing the potential for and the presence of historic and/or archaeological resources at a proposed development site. DEEP advises a review for the resources identified below ***be initiated up to one year*** prior to registration for this permit *(or prior to property purchase if possible)* and in conjunction with the local project approval process. However, a review conducted for an Army Corps of Engineers Section 404 wetland permit would meet this requirement.

Step 1: Determine if the proposed site is within an area of significance by consulting the following resources:

1. CT Register of Historic Places found at the link below:
   http://www.nationalregisterofhistoricplaces.com/CT/state.html#pickem

2. The municipality of the proposed development site for its designations of local historic districts, including but not limited to, local Historic District and/or Property Statutes.

Step 2: Assess site characteristics to determine the presence of a potential archaeological site, sacred site, and/ or sacred object as described below:

Definitions:

1. "Archaeological site" means a location where there exists material evidence that is not less than fifty years old of the past life and culture of human beings in the state.

2. "Sacred site" or "sacred land" means any space, including an archaeological site, of ritual or traditional significance in the culture and religion of Native Americans that is listed or eligible for listing on the National Register of Historic Places (16 USC 470a, as amended) or the state register of historic places defined in section 10-410, including, but not limited to, marked and unmarked human burials, burial areas and cemeteries, monumental geological or natural features with sacred meaning or a meaning central to a group's oral traditions; sites of ceremonial structures, including sweat lodges; rock art sites, and sites of great historical significance to a tribe native to this state.

3. "Sacred object" means any archaeological artifact or other object associated with a sacred site.

Site Prescreening Criteria:

1. Does the proposed development site include lands within 300 feet of surface water features, such as streams, brooks, lakes, or marshes?
If "yes", proceed to Criterion 2. If the answer to Criterion 1 is "no", then there is a low potential for prehistoric period archaeological resources - Proceed to Criterion 3.

2. Does the area of anticipated construction or ground disturbance include soils classified by the Natural Resource Conservation Service as "Sandy Loam/ Loamy sand" or "Sandy Gravel Loam" not including "Fine Sandy Loam/ Loamy sand" with slopes less than or equal to 15%? (Soil mapping information is available for free from: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)

If the answer to Criterion 2 is no, then there is a low potential for prehistoric period archaeological resources - Proceed to Criterion 3. If yes, the project site may contain significant prehistoric period archaeological resources

– assess all other criteria and proceed to Step 3.

3. Are there buildings or structures over 150 years in age with the project site?
If no, proceed to Criterion 4. If yes, the project site may contain significant historic period archaeological resources – assess all other criteria and proceed to Step 3.

4. Are there buildings or structures shown within or immediately adjacent to the project site on the 1850's Connecticut County maps?
Historic County maps are here:
Fairfield - http://www.flickr.com/photos/uconnlibrariesmagic/3387034755/
Hartford - http://www.flickr.com/photos/uconnlibrariesmagic/3386955421/
Litchfield - http://www.flickr.com/photos/uconnlibrariesmagic/3387765290/
Middlesex - http://www.flickr.com/photos/uconnlibrariesmagic/3386956185/
New Haven - http://www.flickr.com/photos/uconnlibrariesmagic/3386956345/
New London - http://www.flickr.com/photos/uconnlibrariesmagic/3387766080/
Tolland - http://www.flickr.com/photos/uconnlibrariesmagic/3386957013/
Windham - http://www.flickr.com/photos/uconnlibrariesmagic/3387766950/

To look for buildings and structures click on the appropriate county map link. From the "Actions" drop-down menu choose "View all sizes". On the "Photo/All sizes" page, choose "Original" to view the county map at an enlarged scale.

If no, there is a low potential for significant historic period archaeological resources. If yes, the site may contain significant historic period archaeological resources- assess all other criteria and proceed to Step 3.

Step 3: If you answered yes to Criterion 2, 3, or 4, please contact Daniel Forrest (860-256-2761 or daniel.forrest@ct.gov) or the current environmental review coordinator at the State Historic Preservation Office, Department of Economic and Community Development for additional guidance.

Step 4: Report in the Registration Form for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities that a review has been conducted and the results of the review (i.e. the proposed site does not have the potential for historic/ archaeological resources, or that such potential exists and is being or has been reviewed by the Connecticut Commission on Culture and Tourism).

Please note that DEEP will refer all proposed sites with a historic/ archaeological resource potential (as identified in Steps 1 & 2 above) to the State Historic Preservation Office at the Department of Economic and Community Development..

Appendix H
Wild & Scenic Rivers Guidance

Overview: Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act (WSRA) charges administration of rivers in the National Wild and Scenic Rivers System (National System) to four federal land management agencies (Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service). However, to protect and enhance river values as directed in the WSRA, it is essential to use the authorities of a number of other federal agencies in administering the water column, river bed/bank, and upland river corridor.

Congress declared a policy to protect selected rivers in the nation through the WSRA. The river-administering agencies are to protect the river's identified values, free-flowing condition, and associated water quality. Specifically, each component is to be "administered in such manner as to protect and enhance the (outstandingly remarkable) values (**ORVs**) which caused it to be included in said system. . . ."

The WSRA also directs other federal agencies to protect river values. It explicitly recognizes the Federal Energy Regulatory Commission, Environmental Protection Agency, Army Corps of Engineers and any other federal department or agency with lands on or adjacent to designated (or congressionally authorized study) rivers or that permit or assist in the construction of water resources projects.

Pertinent Sections of the Wild and Scenic Rivers Act

The full Wild and Scenic Rivers Act can be found at the website: www.rivers.gov
Pertinent Sections related to the mandate to protect river values through coordinated federal actions is found in several sections of the WSRA:

Section 1(b)	Section 7(a)	Section 10(a)
Section 12(a)	Section 12(c)	

Designated Rivers under the Wild and Scenic Rivers Act and Contact Information

The full listing of designated rivers can be found on the website www.rivers.gov
As of the date of this publication, there are two designated rivers in Connecticut, both of which are managed under the Partnership Wild and Scenic Rivers Program, through a Coordinating Committee consisting of representatives from local communities and organizations, state government and the National Park Service. More information about these rivers, their watersheds, approved management plans, the Wild and Scenic Coordinating Committees and specific contact information can be found on the websites.

1. West Branch of the Farmington River: www.farmingtonriver.org
2. Eightmile River: www.eightmileriver.org

APPENDIX B
STORMWATER POLLUTION CONTROL PLAN (SWPCP) REVIEW

Project # _____ Reviewer: _____

Review Fee $ _____ Payment Received: ☐ Full _____

Site Visit(s) Date: _____ Date: _____ Date: _____

Tracking and Milestones:

_____

_____

_____

_____

_____

_____

_____

STORMWATER POLLUTION CONTROL PLAN (SWPCP) REVIEW

GENERAL PERMIT FOR DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES

(DEEP-WPED-GP-015)

Registrant Information

Registered Business Name:
Contact person: Phone:

Site Information

Site Name:		
Project Type:		
Number of lots/acres:		
Address:		
City/Town:	State:	Zip Code:

List Plans, Calculations and Reports Provided by the Registrant

Registration Information

Part I: Registration Type

- ☐ Type of registration (i.e. locally approvable, locally exempt, re-registration, new registration)

Part II: Fee information

- ☐ Indication of fee payment

Part III: Registrant information

- ☐ Name, address, phone and contact person for registrant
- ☐ Registrant's Secretary of State ID # (if applicable)
- ☐ Billing contact name, address and phone (if different from registrant)
- ☐ Primary contact person (if different from registrant) with all contact information
- ☐ Property owner and contact information (if different from registrant)
- ☐ Developer's name and contact information (if different from registrant)
- ☐ General contractor and contact information (if different from registrant)
- ☐ Name of consultant(s) who assisted in registration and/or SWPCP and contact information
- ☐ Signatures of contractors/subcontractors

Part IV: Site information

- ☐ Site name and location
- ☐ Description of the project
- ☐ Duration of construction activities
- ☐ Normal working hours on-site
- ☐ Mining operation determination
- ☐ Sanitary or combined sewer discharge determination
- ☐ Federally recognized Indian lands determination
- ☐ Coastal Boundary determination
- ☐ Endangered or Threatened Species determination
- ☐ Wild and Scenic Rivers determination
- ☐ Aquifer Protection Area determination
- ☐ Identified that construction activities are in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (the Guidelines)
- ☐ Historic and/or Archeological Resource determination
- ☐ Conservation or Preservation restriction determination

Part V: Stormwater Discharge information

- ☐ Stormwater Discharge Information Table 1 completed
- ☐ Stormwater Discharge Information Table 2 completed
- ☐ Impaired waters provisions (if applicable)

Part VI: Pollution Control Plan information

- ☐ SWPCP submission status

Part VII: Registrant Certification

- ☐ Certification signed by registrant or re-registrant

Part VIII: PE/LA Certification

- ☐ Design certification signed by licensed PE or LA (where appropriate)

Part IX: Third Party Qualified Professional Certification

- ☐ Review certification by Conservation District or Qualified Professional

Part X: Supporting Documents

- ☐ Attachment A: USGS Quad map (if submitting paper registration)
- ☐ Attachment B: Documentation related to Coastal Consistency Review (if applicable)
- ☐ Attachment C: Threatened and Endangered Species form (if applicable) and additional information (such as a copy of a NDDB map)
- ☐ Attachment D: Conservation or Preservation Restriction Information (if applicable)
- ☐ Attachment E: Non-electronic SWPCP (if applicable)

CONTENTS OF THE STORMWATER POLLUTION CONTROL PLAN (SWPCP)

Soil Erosion and Sediment (E&S) Controls

Site description narrative:

- ☐ Described the nature of the construction activities
- ☐ Provided total site acreage
- ☐ Provided disturbed acreage
- ☐ Estimated average runoff coefficient after construction
- ☐ Identified immediate and ultimate receiving water(s) of all discharges authorized by Permit
- ☐ Identified other permits and/or plans required
- ☐ Identified extent of inland, tidal, and fresh-tidal wetlands

Site map:

- ☐ Existing and planned drainage patterns
- ☐ Existing and planned elevations and slopes
- ☐ Location of structural and non-structural controls
- ☐ Description and map of existing soils
- ☐ Location of outfall(s) proposed for monitoring
- ☐ Limits of soil disturbance
- ☐ Location of surface waters, impaired waters, waters with TMDL's
- ☐ Existing vegetation
- ☐ Locations of E&S controls
- ☐ Location of stabilization practices
- ☐ Location of post-construction re-vegetation
- ☐ Location of utilities, roads and structures
- ☐ Location of surface water, including inland wetlands, fresh-tidal wetlands and tidal wetlands
- ☐ Locations of discharges to surface waters (pre-, during, and post-construction)
- ☐ Locations and provisions for waste disposal
- ☐ Locations and provisions for washout areas
- ☐ Locations and provisions for impaired waters
- ☐ Limits of FEMA floodplains and floodways
- ☐ CT coastal resource limits
- ☐ CT stream encroachment lines
- ☐ Location of any public drinking water supply areas or watersheds

Construction sequencing:

- ☐ Identified sequence of major construction activities and # of days for each sequence
- ☐ Estimated start and completion times for each phase
- ☐ Avoidance of disturbances over 5 acres at one time, where possible
- ☐ Identified limits of disturbance including each phase

Control Measures:

- ☐ Erosion and sediment control measures
- ☐ Provided drawings and specifications for each measure
- ☐ Identified stabilization practices for disturbed areas
- ☐ Identified stabilization practices for stockpiles
- ☐ Identified measures to preserve existing vegetation
- ☐ Provided details of planned vegetation, seed mixes and planting dates
- ☐ Provided details for short-term and long-term stabilization and/or vegetation of disturbed areas
- ☐ Identified practices for non-vegetative long-term and winter stabilization
- ☐ Provided for slope benches for all slopes exceeding 15 feet height and slopes >3:1 or
- ☐ Provided slope stability analysis for engineered slope stabilization measures
- ☐ Provided narrative and drawings for structural diversion and storage measures
- ☐ Sediment traps provided for drainage areas of 2 to 5 acres
- ☐ Temporary sediment basin provided for drainage areas >5 acres
- ☐ Described maintenance for E&S control and stabilization measures
- ☐ Narrative, drawings and calculations of control measures for dewatering wastewaters
- ☐ Description of emergency procedures (for flooding, etc.)
- ☐ Runoff Reduction and Low Impact Development (LID) Information (specific measures for run-off reduction and LID measures):

Control Measures: (continued)

- ☐ The location of the streams, floodplains, all wetlands, riparian buffers, slopes 3:1 and steeper, and vegetation identified for preservation
- ☐ Natural drainage patterns and man-made drainage features
- ☐ Location of areas with soils suitable for infiltration and areas appropriate for LID measures
- ☐ Location of all areas unsuitable or least suitable for infiltration for the siting of development
- ☐ Location of all post-construction stormwater management measures, runoff reduction practices, and LID design measures developed pursuant to subsection 5(b)(2)(C)(i)
- ☐ Identification of areas inappropriate for the infiltration due to potential for groundwater pollution
- ☐ A narrative describing the nature, purpose, implementation, and long-term maintenance of post-construction measures, runoff reduction practices and LID design measures
- ☐ Calculations for measures developed pursuant to Section 5(b)(2)(C)(i), illustrating the retention of the water quality volume or half the water quality volume
- ☐ A narrative describing any site constraints that prevent retention of the appropriate volume specified in Section 5(b)(2)(C)(i)
- ☐ Calculations showing the proposed effective impervious cover for the site and, where necessary or appropriate for measures developed for linear projects pursuant to Section 5(b)(2)(C)(i), each outfall drainage area

Other measures:

- ☐ Description of measures to manage construction waste materials
- ☐ Description of off-site sediment tracking and dust control
- ☐ Narrative, location, and drawings of washout areas
- ☐ Description of maintenance practices for washout areas
- ☐ Indicated cleaning of post-construction stormwater structures prior to termination inspection
- ☐ Indicated removal of silt fence prior to filing termination notice
- ☐ Description and location of chemical and petroleum product storage containment and controls
- ☐ Narrative describing routine inspection procedures
- ☐ Description of qualifications of inspection personnel of the Permittee
- ☐ Narrative describing monitoring procedures, including frequency and methodology
- ☐ List of all contractor and subcontractors
- ☐ Description of Endangered Species measures, if necessary
- ☐ Description of Aquifer Protection provisions, if necessary
- ☐ Description of provisions of Coastal Site Plan approval, if necessary
- ☐ Discussion of archeological or historic preservation issues on site, if necessary
- ☐ Description of activities subject to the Wild & Scenic Rivers Act, if necessary

Impaired waters controls (where applicable):

- ☐ Narrative and plan sequencing to ensure no more than 3 acres concurrent disturbance

AND

- ☐ Identified stabilization practices within 3 days for temporary suspension of activity, **OR**
- ☐ Description and calculations showing retention of 2-year, 24-hour storm, **OR**
- ☐ Compliance with WLA and/or other measures of an existing TMDL

Additional E&S Information:

- ☐ See attached reviewer's comments page
- ☐ Reviewer provided additional information to Registrant: reports, photographs, designs, etc.

Post-construction Stormwater Controls

Show on site map:

- ☐ Indicated retention standards for redevelopment or other development
- ☐ Drainage patterns and slopes after grading
- ☐ Location of LID and runoff reduction measures
- ☐ Location of other structural sedimentation/floatables treatment measures
- ☐ Location of velocity dissipation measures
- ☐ Provided drawings and specifications of each stormwater structure/measure

Narrative of post-construction controls:

- ☐ Description of control measures for post-construction stormwater discharge
- ☐ Long-term maintenance plan for cleaning of post-construction stormwater structures

Additional Stormwater Management Information:

- ☐ See attached reviewer's comments page
- ☐ Reviewer provided additional information to Registrant: reports, photographs, designs, etc.

Supporting Documents (as needed):

- ☐ Calculations supporting the design of sediment and floatables removal controls pursuant to Section 5(b)(2)(C)(ii)(b)
- ☐ Calculations supporting the design of velocity dissipation controls pursuant to Section 5(b)(2)(C)(ii)(c)
- ☐ Provided boring logs, test pit logs, soil reports, etc.
- ☐ Provided hydraulic calculations for existing and planned hydrology
- ☐ Provided calculations for LID and runoff reduction measures (WQV or ½ WQV retention)
- ☐ Provided engineering calculations for any engineered control measures
- ☐ Pre- and post-construction peak flow calculations
- ☐ 1 inch of rainfall retained onsite if within 500 feet of a non-fresh tidal wetland
- ☐ Provide a post-construction average runoff coefficient
- ☐ Off-site effect of flow and volume
- ☐ Groundwater flow estimates
- ☐ Inspection forms and checklist
- ☐ Contractor Certification Statement (including individual lot developers)
- ☐ Demonstration of compliance with TMDL, where applicable
- ☐ Plan Signature

IDENTIFIED SOIL EROSION AND SEDIMENT CONTROL MEASURES IN SITE PLANS

Function	Measure	Phase/Sheet	Engineered Design	Calculations Provided	Reviewer Comments
Protect Vegetation	Tree Protection		No		
Preserve & conserve soil	Topsoiling		No		
	Land Grading		Possibly		
	Surface Roughening		No		
	Dust Control		No		
Vegetative soil cover	Temporary Seeding		No		
	Permanent Seeding		No		
	Sodding		No		
	Landscape Planting		No		
Non-living soil protection	Temporary Soil Protection		No		
	Mulch for Seed		No		
	Landscape Mulch		No		
	Temporary Erosion Control Blanket		No		
	Permanent Turf Reinf. Mats		Yes		
	Stone Slope Protection		No		
Stabilization structures	Retaining Walls		Yes		
	Riprap		Yes		
	Gabions		Yes		
	Permanent Slope Drain		Yes		
	Channel Grade Stabilization Structure		Yes		
	Temporary Lined Chute		Yes		
	Temporary Pipe Slope Drain		Yes		
Drainageways & watercourses	Vegetated Waterway		Possibly		
	Temporary Lined Channel		No		
	Permanent Lined Waterway		Yes		
	Temporary Stream Crossing		No		
Diversions	Temporary Fill Berm		No		
	Water Bar		No		
	Temporary Diversion		Possibly		
	Permanent Diversion		Yes		
Subsurface drain	Subsurface Drain		Yes		

IDENTIFIED SOIL EROSION AND SEDIMENT CONTROL MEASURES IN SITE PLANS (CONTINUED)

Detention structures	Detention Basin		Yes		
Energy dissipators	Level Spreader		Yes		
	Outlet Protection		Yes		
	Stone Check Dam		Possibly		
Sediment impoundments, barriers & filters	Temporary Sediment Basin		Yes		
	Temporary Sediment Trap		No		
	Hay Bale Barrier		No		
	Geotextile Silt Fence		No		
	Turbidity Curtain		No		
	Vegetative Filter		No		
Tire tracked soils	Construction Entrance		No		
Dewatering	Pump Intake and Outlet Protection		No		
	Pump Settling Basin		No		
	Portable Sediment Tank		No		
	Dewatering of Earth Materials		Possibly		

ADDITIONAL COMMENTS FOR E&S CONTROL MEASURES:

IDENTIFIED STORMWATER CONTROL MEASURES IN SITE PLANS

Primary Treatment Practices	Phase/Sheet	Engineered Design	Calculations Provided	Low Impact Development
Micropool extended detention				
Wet pond				
Wet extended detention pond				
Multiple pond system				
Pocket pond				
Shallow wetland				
Extended detention wetland				
Pond/wetland system				
Gravel wetland				
Infiltration Trench				
Infiltration Basin				
Infiltration Parking Island				
Surface sand filter				
Underground sand filter				
Perimeter sand filter				
Organic filter				
Tree box filter				
Bioretention/raingarden				
Green Roof				
Dry swales				
Wet swales				
Secondary Treatment Practices				
Dry detention pond				
Underground detention facilities				
Deep sump catch basins				
Oil/particle separators				
Dry wells				
Permeable pavement/pavers				
Vegetated filter strips				
Grass drainage channels				
Other/Innovative/Emerging Technology				
Catch basin inserts				
Hydrodynamic separators				
Media filters				
Underground filtration systems				
Alum injections				
Rainfall harvesting/cisterns				

STORMWATER MANAGEMENT AND TREATMENT PRACTICES

The General Permit provides goals for the post-construction stormwater management to control discharges of stormwater pollutants. Some measures may not require all of the following information.

Stormwater Control Measure: _____

Name in Plans _____ Practice _____ Location _____

(Complete this sheet for each post-construction stormwater measure)

Discharge Calculations provided:

1. Water Quality Volume (WQV) = (ac-ft)
2. Water Quality Flow (WQF) = (cfs)
3. Groundwater Recharge Volume (GRV) = (ac-ft)
4. Runoff Capture Volume (RCV) = (ac-ft)
   (only required for non-fresh tidal discharges)
5. Provided Peak Discharge Rates for the following storm events:

Storm Event	Pre-Development (cfs)	Post-Development (cfs)	Change (+/- cfs)
24 hr			
2-year			
10-year			
25-year			
100-year			
500-year			

This stormwater measure (or as part of a discharge treatment train) meets the goals of the General Permit: ☐ Yes ☐ No

Comments:

ADDITIONAL COMMENTS FOR STORMWATER TREATMENT PRACTICES:

Site Inspection Worksheet for E&S and Stormwater Control Measures

Project #: _____ Plans Dated _____ Last Revised _____

District: _____ Reviewer: _____

Location: _____

Project Description: _____

Contact Person for the Site:

Name: _____ _____

Company: _____ Phone: _____

Site Visit Date: _____

Weather conditions: _____

Photographs taken	☐ Yes	☐ No
Contacted Responsible Party	☐ Yes	☐ No
Inspection submitted to CT DEP	☐ Yes	☐ No
Inspection submitted to Permittee	☐ Yes	☐ No

Comments:

APPENDIX C
CORRESPONDENCE FROM CT DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT, STATE HISTORIC PRESERVATION OFFICE

Connecticut
still revolutionary

Department of Economic and Community Development

State Historic Preservation Office

November 1, 2017

Ms. Lynn Gresock
Tetra Tech
2 Lan Drive, Suite 210
Westford, MA 01886

Subject: Wallingford Renewable Energy
Quinnipiac River and South Cherry Street
Wallingford, Connecticut

Dear Ms. Gresock:

The State Historic Preservation Office (SHPO) is in receipt of your request for our comments on the potential effects of the referenced project on historic properties. The request for comments is in support of a request for a Declaratory Ruling from the Connecticut Siting Council and is subject to the provisions of the Connecticut Environmental Policy Act. The proposed project consists of constructing a solar energy facility within a 250 parcel between the Quinnipiac River to the west and South Cherry Street to the east.

There are no properties listed on the National Register of Historic Places recorded within or immediately adjacent to the Area of Potential Effects (APE) for this project. The project area is considered to be archeologically sensitive with several previously recorded sites in their vicinity. As noted in your submission, however, it is unlikely intact archeological resources are located in the project areas because of prior disturbances related to multiple development projects (landfill, waste treatment facilities, pipelines, trailer park, etc.) or in wetland soils not favorable to human habitation. Based on the information provided to our office, no archeological investigations are warranted. It is SHPO's opinion that no historic properties will be affected by the proposed solar energy facility.

SHPO appreciates the opportunity to review and comment upon this project. For additional information, please contact me at (860) 500-2329 or catherine.labadia@ct.gov.

Sincerely,

Catherine Labadia
Deputy State Historic Preservation Officer

APPENDIX D
CORRESPONDENCE FROM CTDEEP'S NDDB PROGRAM

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

April 7, 2017

Jessica Roberts
Tighe & Bond, Inc.
53 Southampton Road
Westfield, MA 01085
jbroberts@tighebond.com

NDDB Preliminary Determination No: 201702359
Project: Preliminary site assessment for commercial/industrial development;
Mira Site - 2 Oliver Road and 100 Pent Road; Wallingford, CT

Dear Jessica Roberts,

I have reviewed Natural Diversity Data Base (NDDB) maps and files regarding the Mira Site at 2 Oliver Road and 100 Pent Road in Wallingford, Connecticut. According to our records, the following State-listed species have been documented in the vicinity and may occur on-site if appropriate habitat exists:

State-listed Wildlife Species

- **Ground beetle (*Amara chalcea*)**
  Protection Status: State Special Concern
  Sand barren specialist.
- **Big sand tiger beetle (*Cicindela formosa generosa*)**
  Protection Status: State Special Concern
  Sand barren specialist.
- **Dark-bellied tiger beetle (*Cicindela tranquebarica*)**
  Protection Status: State Threatened
  Requires sandy soils.
- **False heather underwing (*Drasteria graphica atlantica*)**
  Protection Status: State Threatened
  Barrens, dunes, heathlands, and coastal strand communities
- **Violet dart moth (*Euxoa violaris*)**
  Protection Status: State Special Concern
  Sand barren specialist.
- **Ground beetle (*Helluomorphoides praeustus bicolor*)**
  Protection Status: State Special Concern
  Sandy, barren areas
- **Yellow-horned beaded lacewing (*Lomamyia flavicornis*)**
  Protection Status: State Special Concern
  Grassland in pitch pine/scrub oak settings

- **Scribbled sallow moth (*Sympistis perscripta*)**
  Protection Status: State Special Concern
  Open, disturbed, sandy areas. Host plant is Canada toadflax (*Nuttallanthus canadensis*)
- **Grassland thaumatopsis (*Thaumatopsis edonis*)**
  Protection Status: State Threatened
- **Northern dusk-singing cicada (*Tibicen auletes*)**
  Protection Status: State Endangered
  Dry oak forests on sandy soil. Larvae feed on oak roots (*Quercus* spp.)
- **Spinose flower moth (*Schinia spinosae*)**
  Protection Status: State Special Concern
  Host plant is associated with sandy soils.
- **Black-eyed zale (*Zale curema*)**
  Protection Status: State Endangered
  Pitch pine woodlands. Host plant is pitch pine (*Pinus rigida*)
- **Oblique zale (*Zale obliqua*)**
  Protection Status: State Special Concern
  Barrens, plantations, pinelands, and mixed-pine woodlands. Host plants include pitch pine (*Pinus rigida*), jack pine (*Pinus banksiana*), and red pine (*Pinus resinosa*)

State-listed Plant Species

- **Beach needle grass (*Aristida tuberculosa*)**
  Protection Status: State Endangered
  Habitat: Coastal sand dunes, sand flats, and sandy woods. Blooms Aug, Sep.
- **Low frostweed (*Crocanthemum propinquum*)**
  Protection Status: State Special Concern
  Habitat: Dry, open, sandy soil. Blooms mid-late Jun.
- **False mermaid-weed (*Floerkea proserpinacoides*)**
  Protection Status: State Endangered
  Habitat: Damp, shaded, alluvial woods; early, spring-flooding stream bottoms. Blooms Apr, May.
- **Sickle-leaved golden aster (*Pityopsis falcata*)**
  Protection Status: State Endangered
  Habitat: Dry, open, sandy fields and dunes. Blooms Jul – Oct.

Additionally, the following Connecticut Critical Habitat has been mapped on-site in association with the Quinnipiac River:

- **Floodplain Forest** – Mesic forests and associated open, alluvial wetlands influenced by seasonal inundation, with flood deposited sandy or nutrient-rich silty soils. Subtypes high floodplain, low floodplain forest, alluvial swamp, undifferentiated, and other/unique are includes in the Palustrine Forested category.

Please be advised that this is a preliminary assessment and not a final determination. This preliminary assessment letter cannot be used or submitted with permit applications.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Bureau of Natural Resources and cooperating units of DEEP, independent conservation groups, and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated in the NDDB as it becomes available.

Please contact me if you have any questions (nelson.debarros@ct.gov; 860-424-3585). Thank you for consulting with the Natural Diversity Data Base and continuing to work with us to protect State-listed species.

Sincerely,

Nelson B. DeBarros
Botanist/Ecologist

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

April 7, 2017

Jessica Roberts
Tighe & Bond, Inc.
53 Southampton Road
Westfield, MA 01085
jbroberts@tighebond.com

NDDB Preliminary Determination No: 201702360
Project: Preliminary site assessment for Town of Wallingford parcel at 155 John Street; Wallingford, CT

Dear Jessica Roberts,

I have reviewed Natural Diversity Data Base (NDDB) maps and files regarding 155 John Street in Wallingford, Connecticut. According to our records, the following Connecticut Critical Habitat has been mapped on-site in association with the Quinnipiac River:

- **Floodplain Forest** – Mesic forests and associated open, alluvial wetlands influenced by seasonal inundation, with flood deposited sandy or nutrient-rich silty soils. Subtypes high floodplain, low floodplain forest, alluvial swamp, undifferentiated, and other/unique are includes in the Palustrine Forested category.

Additionally, the following State-listed plant species has been documented within the Quinnipiac River floodplain and may occur on-site:

- **False mermaid-weed (*Floerkea proserpinacoides*)**
  Protection Status: State Endangered
  Habitat: Damp, shaded, alluvial woods; early, spring-flooding stream bottoms.
  Blooms Apr, May.

Please be advised that this is a preliminary assessment and not a final determination. This preliminary assessment letter cannot be used or submitted with permit applications.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Bureau of Natural Resources and cooperating units of DEEP, independent conservation groups, and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors

continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated in the NDDB as it becomes available.

Please contact me if you have any questions (nelson.debarros@ct.gov; 860-424-3585). Thank you for consulting with the Natural Diversity Data Base and continuing to work with us to protect State-listed species.

Sincerely,

Nelson B. DeBarros
Botanist/Ecologist

APPENDIX E
STORMWATER CONSTRUCTION SITE INSPECTION REPORT

STORMWATER CONSTRUCTION SITE INSPECTION REPORT

General Information			
Project Name			
NPDES Tracking No.		**Location**	
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications	Insert qualifications or add reference to the SWPPP. (See Section 5 of the SWPPP Template)		
Describe present phase of construction			

Type of Inspection:
❑ Regular ❑ Pre-storm event ❑ During storm event ❑ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ❑Yes ❑No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds
❑ Other: Temperature:

Have any discharges occurred since the last inspection? ❑Yes ❑No
If yes, describe:

Are there any discharges at the time of inspection? ❑Yes ❑No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		❑Yes ❑No	❑Yes ❑No	
2		❑Yes ❑No	❑Yes ❑No	
3		❑Yes ❑No	❑Yes ❑No	
4		❑Yes ❑No	❑Yes ❑No	
5		❑Yes ❑No	❑Yes ❑No	
6		❑Yes ❑No	❑Yes ❑No	
7		❑Yes ❑No	❑Yes ❑No	
8		❑Yes ❑No	❑Yes ❑No	
9		❑Yes ❑No	❑Yes ❑No	

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
10		❑Yes ❑No	❑Yes ❑No	
11		❑Yes ❑No	❑Yes ❑No	
12		❑Yes ❑No	❑Yes ❑No	
13		❑Yes ❑No	❑Yes ❑No	
14		❑Yes ❑No	❑Yes ❑No	
15		❑Yes ❑No	❑Yes ❑No	
16		❑Yes ❑No	❑Yes ❑No	
17		❑Yes ❑No	❑Yes ❑No	
18		❑Yes ❑No	❑Yes ❑No	
19		❑Yes ❑No	❑Yes ❑No	
20		❑Yes ❑No	❑Yes ❑No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	❑Yes ❑No	❑Yes ❑No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	❑Yes ❑No	❑Yes ❑No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	❑Yes ❑No	❑Yes ❑No	
4	Are discharge points and receiving waters free of any sediment deposits?	❑Yes ❑No	❑Yes ❑No	
5	Are storm drain inlets properly protected?	❑Yes ❑No	❑Yes ❑No	
6	Is the construction exit preventing sediment from being tracked into the street?	❑Yes ❑No	❑Yes ❑No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	❑Yes ❑No	❑Yes ❑No	

STORMWATER CONSTRUCTION SITE INSPECTION REPORT

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No	❑Yes ❑No	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	❑Yes ❑No	❑Yes ❑No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No	❑Yes ❑No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑Yes ❑No	❑Yes ❑No	
12	(Other)	❑Yes ❑No	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: _____

Signature:_____ Date:_____

APPENDIX F
STORMWATER MONITORING REPORT

Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, issued 8/21/13, effective 10/1/13
Stormwater Monitoring Report

SITE INFORMATION

Permittee: _____

Mailing Address: _____

Business Phone: _____ ext.: _____ Fax: _____

Contact Person: _____ Title: _____

Site Name: _____

Site Address: _____

Receiving Water (name, basin): _____

Stormwater Permit No. GSN _____

SAMPLING INFORMATION (Submit a separate form for each outfall)

Outfall Designation: _____ Date/Time Collected: _____

Outfall Location(s) (lat/lon or map link): _____

Person Collecting Sample: _____

Storm Magnitude (inches): _____ Storm Duration (hours): _____

Size of Disturbed Area at any time: _____

MONITORING RESULTS

Sample #	Parameter	Method	Results (units)	Laboratory (if applicable)
1	Turbidity			
2	Turbidity			
3	Turbidity			
4	Turbidity			

(provide an attachment if more than 4 samples were taken for this outfall) Avg =

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

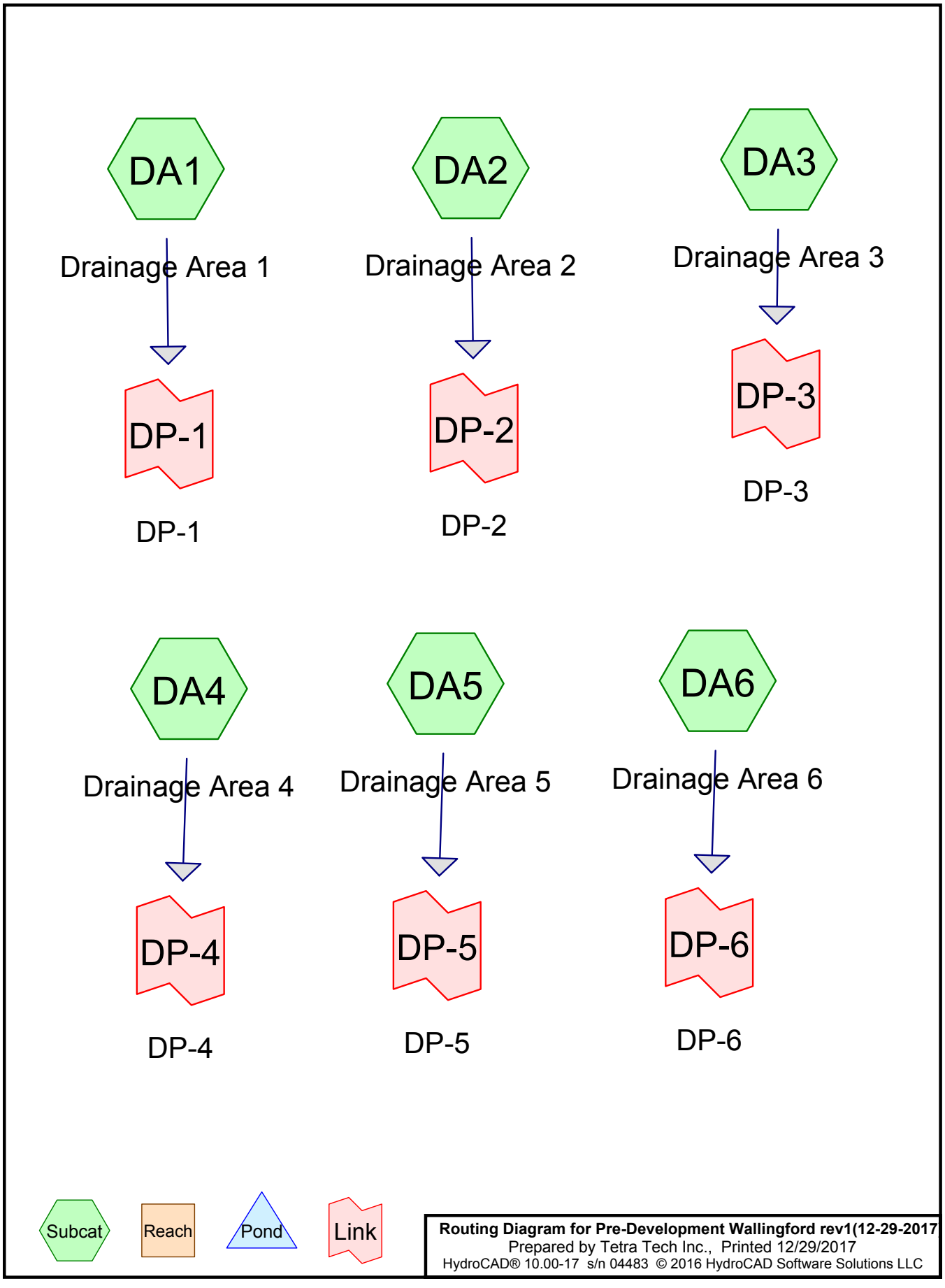
Authorized Official: _____

Signature: _____ Date: _____

Please send completed form to:

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE
79 ELM STREET
HARTFORD, CT 06106-5127
ATTN: NEAL WILLIAMS

APPENDIX G
PRE-DEVELOPMENT DRAINAGE ANALYSIS



Routing Diagram for Pre-Development Wallingford rev1(12-29-2017
Prepared by Tetra Tech Inc., Printed 12/29/2017

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,106 sf 0.00% Impervious Runoff Depth>1.18"
Tc=6.0 min CN=84 Runoff=17.41 cfs 1.174 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 1.51% Impervious Runoff Depth>1.18"
Tc=6.0 min CN=84 Runoff=20.08 cfs 1.354 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 2.86% Impervious Runoff Depth>1.18"
Tc=6.0 min CN=84 Runoff=28.59 cfs 1.928 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.69% Impervious Runoff Depth>1.18"
Tc=6.0 min CN=84 Runoff=37.60 cfs 2.535 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,175 sf 9.76% Impervious Runoff Depth>0.74"
Tc=6.0 min CN=76 Runoff=77.01 cfs 5.412 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 2.33% Impervious Runoff Depth>0.95"
Tc=6.0 min CN=80 Runoff=11.85 cfs 0.808 af

Link DP-1: DP-1 Inflow=17.41 cfs 1.174 af
Primary=17.41 cfs 1.174 af

Link DP-2: DP-2 Inflow=20.08 cfs 1.354 af
Primary=20.08 cfs 1.354 af

Link DP-3: DP-3 Inflow=28.59 cfs 1.928 af
Primary=28.59 cfs 1.928 af

Link DP-4: DP-4 Inflow=37.60 cfs 2.535 af
Primary=37.60 cfs 2.535 af

Link DP-5: DP-5 Inflow=77.01 cfs 5.412 af
Primary=77.01 cfs 5.412 af

Link DP-6: DP-6 Inflow=11.85 cfs 0.808 af
Primary=11.85 cfs 0.808 af

Total Runoff Area = 168.600 ac Runoff Volume = 13.209 af Average Runoff Depth = 0.94"
94.09% Pervious = 158.642 ac 5.91% Impervious = 9.958 ac

Pre-Development Wallingford rev1(12-29-2017) *Type III 24-hr 1-Year Rainfall=2.70"*
Prepared by Tetra Tech Inc. Printed 12/29/2017
HydroCAD® 10.00-17 s/n 04483 © 2016 HydroCAD Software Solutions LLC

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 17.41 cfs @ 12.09 hrs, Volume= 1.174 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	520,106	84	Landfill
	520,106		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 20.08 cfs @ 12.09 hrs, Volume= 1.354 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	590,788	84	Landfill
	9,033	98	Paved parking, HSG C
	599,821	84	Weighted Average
	590,788		98.49% Pervious Area
	9,033		1.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 28.59 cfs @ 12.09 hrs, Volume= 1.928 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	829,754	84	Landfill
	24,457	98	Paved parking, HSG C
	854,211	84	Weighted Average
	829,754		97.14% Pervious Area
	24,457		2.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 37.60 cfs @ 12.09 hrs, Volume= 2.535 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	1,104,468	84	Landfill
	17,192	98	Paved parking, HSG C
	1,752	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,104,468		98.31% Pervious Area
	18,944		1.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 77.01 cfs @ 12.10 hrs, Volume= 5.412 af, Depth> 0.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	2,371,130	84	Landfill
	370,972	98	Paved parking, HSG C
	423,665	68	<50% Grass cover, Poor, HSG A
	634,408	36	Woods, Fair, HSG A
	3,800,175	76	Weighted Average
	3,429,203		90.24% Pervious Area
	370,972		9.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 11.85 cfs @ 12.10 hrs, Volume= 0.808 af, Depth> 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	399,079	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	36	Woods, Fair, HSG A
	446,490	80	Weighted Average
	436,105		97.67% Pervious Area
	10,385		2.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 0.00% Impervious, Inflow Depth > 1.18" for 1-Year event
Inflow = 17.41 cfs @ 12.09 hrs, Volume= 1.174 af
Primary = 17.41 cfs @ 12.09 hrs, Volume= 1.174 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 1.51% Impervious, Inflow Depth > 1.18" for 1-Year event
Inflow = 20.08 cfs @ 12.09 hrs, Volume= 1.354 af
Primary = 20.08 cfs @ 12.09 hrs, Volume= 1.354 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 2.86% Impervious, Inflow Depth > 1.18" for 1-Year event
Inflow = 28.59 cfs @ 12.09 hrs, Volume= 1.928 af
Primary = 28.59 cfs @ 12.09 hrs, Volume= 1.928 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.69% Impervious, Inflow Depth > 1.18" for 1-Year event
Inflow = 37.60 cfs @ 12.09 hrs, Volume= 2.535 af
Primary = 37.60 cfs @ 12.09 hrs, Volume= 2.535 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 9.76% Impervious, Inflow Depth > 0.74" for 1-Year event
Inflow = 77.01 cfs @ 12.10 hrs, Volume= 5.412 af
Primary = 77.01 cfs @ 12.10 hrs, Volume= 5.412 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 2.33% Impervious, Inflow Depth > 0.95" for 1-Year event
Inflow = 11.85 cfs @ 12.10 hrs, Volume= 0.808 af
Primary = 11.85 cfs @ 12.10 hrs, Volume= 0.808 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,106 sf 0.00% Impervious Runoff Depth>1.64"
Tc=6.0 min CN=84 Runoff=24.25 cfs 1.637 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 1.51% Impervious Runoff Depth>1.64"
Tc=6.0 min CN=84 Runoff=27.96 cfs 1.887 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 2.86% Impervious Runoff Depth>1.64"
Tc=6.0 min CN=84 Runoff=39.82 cfs 2.688 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.69% Impervious Runoff Depth>1.64"
Tc=6.0 min CN=84 Runoff=52.37 cfs 3.535 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,175 sf 9.76% Impervious Runoff Depth>1.12"
Tc=6.0 min CN=76 Runoff=119.21 cfs 8.149 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 2.33% Impervious Runoff Depth>1.37"
Tc=6.0 min CN=80 Runoff=17.30 cfs 1.168 af

Link DP-1: DP-1 Inflow=24.25 cfs 1.637 af
Primary=24.25 cfs 1.637 af

Link DP-2: DP-2 Inflow=27.96 cfs 1.887 af
Primary=27.96 cfs 1.887 af

Link DP-3: DP-3 Inflow=39.82 cfs 2.688 af
Primary=39.82 cfs 2.688 af

Link DP-4: DP-4 Inflow=52.37 cfs 3.535 af
Primary=52.37 cfs 3.535 af

Link DP-5: DP-5 Inflow=119.21 cfs 8.149 af
Primary=119.21 cfs 8.149 af

Link DP-6: DP-6 Inflow=17.30 cfs 1.168 af
Primary=17.30 cfs 1.168 af

Total Runoff Area = 168.600 ac Runoff Volume = 19.064 af Average Runoff Depth = 1.36"
94.09% Pervious = 158.642 ac 5.91% Impervious = 9.958 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 24.25 cfs @ 12.09 hrs, Volume= 1.637 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	520,106	84	Landfill
	520,106		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 27.96 cfs @ 12.09 hrs, Volume= 1.887 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	590,788	84	Landfill
	9,033	98	Paved parking, HSG C
	599,821	84	Weighted Average
	590,788		98.49% Pervious Area
	9,033		1.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 39.82 cfs @ 12.09 hrs, Volume= 2.688 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	829,754	84	Landfill
	24,457	98	Paved parking, HSG C
	854,211	84	Weighted Average
	829,754		97.14% Pervious Area
	24,457		2.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 52.37 cfs @ 12.09 hrs, Volume= 3.535 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	1,104,468	84	Landfill
	17,192	98	Paved parking, HSG C
	1,752	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,104,468		98.31% Pervious Area
	18,944		1.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 119.21 cfs @ 12.10 hrs, Volume= 8.149 af, Depth> 1.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	2,371,130	84	Landfill
	370,972	98	Paved parking, HSG C
	423,665	68	<50% Grass cover, Poor, HSG A
	634,408	36	Woods, Fair, HSG A
	3,800,175	76	Weighted Average
	3,429,203		90.24% Pervious Area
	370,972		9.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 17.30 cfs @ 12.10 hrs, Volume= 1.168 af, Depth> 1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	399,079	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	36	Woods, Fair, HSG A
	446,490	80	Weighted Average
	436,105		97.67% Pervious Area
	10,385		2.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 0.00% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 24.25 cfs @ 12.09 hrs, Volume= 1.637 af
Primary = 24.25 cfs @ 12.09 hrs, Volume= 1.637 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 1.51% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 27.96 cfs @ 12.09 hrs, Volume= 1.887 af
Primary = 27.96 cfs @ 12.09 hrs, Volume= 1.887 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 2.86% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 39.82 cfs @ 12.09 hrs, Volume= 2.688 af
Primary = 39.82 cfs @ 12.09 hrs, Volume= 2.688 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.69% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 52.37 cfs @ 12.09 hrs, Volume= 3.535 af
Primary = 52.37 cfs @ 12.09 hrs, Volume= 3.535 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 9.76% Impervious, Inflow Depth > 1.12" for 2-Year event
Inflow = 119.21 cfs @ 12.10 hrs, Volume= 8.149 af
Primary = 119.21 cfs @ 12.10 hrs, Volume= 8.149 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 2.33% Impervious, Inflow Depth > 1.37" for 2-Year event
Inflow = 17.30 cfs @ 12.10 hrs, Volume= 1.168 af
Primary = 17.30 cfs @ 12.10 hrs, Volume= 1.168 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,106 sf 0.00% Impervious Runoff Depth>3.07"
Tc=6.0 min CN=84 Runoff=44.49 cfs 3.055 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 1.51% Impervious Runoff Depth>3.07"
Tc=6.0 min CN=84 Runoff=51.31 cfs 3.523 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 2.86% Impervious Runoff Depth>3.07"
Tc=6.0 min CN=84 Runoff=73.08 cfs 5.017 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.69% Impervious Runoff Depth>3.07"
Tc=6.0 min CN=84 Runoff=96.10 cfs 6.599 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,175 sf 9.76% Impervious Runoff Depth>2.36"
Tc=6.0 min CN=76 Runoff=254.05 cfs 17.127 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 2.33% Impervious Runoff Depth>2.70"
Tc=6.0 min CN=80 Runoff=34.06 cfs 2.308 af

Link DP-1: DP-1 Inflow=44.49 cfs 3.055 af
Primary=44.49 cfs 3.055 af

Link DP-2: DP-2 Inflow=51.31 cfs 3.523 af
Primary=51.31 cfs 3.523 af

Link DP-3: DP-3 Inflow=73.08 cfs 5.017 af
Primary=73.08 cfs 5.017 af

Link DP-4: DP-4 Inflow=96.10 cfs 6.599 af
Primary=96.10 cfs 6.599 af

Link DP-5: DP-5 Inflow=254.05 cfs 17.127 af
Primary=254.05 cfs 17.127 af

Link DP-6: DP-6 Inflow=34.06 cfs 2.308 af
Primary=34.06 cfs 2.308 af

Total Runoff Area = 168.600 ac Runoff Volume = 37.630 af Average Runoff Depth = 2.68"
94.09% Pervious = 158.642 ac 5.91% Impervious = 9.958 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 44.49 cfs @ 12.09 hrs, Volume= 3.055 af, Depth> 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	520,106	84	Landfill
	520,106		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 51.31 cfs @ 12.09 hrs, Volume= 3.523 af, Depth> 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	590,788	84	Landfill
	9,033	98	Paved parking, HSG C
	599,821	84	Weighted Average
	590,788		98.49% Pervious Area
	9,033		1.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 73.08 cfs @ 12.09 hrs, Volume= 5.017 af, Depth> 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	829,754	84	Landfill
	24,457	98	Paved parking, HSG C
	854,211	84	Weighted Average
	829,754		97.14% Pervious Area
	24,457		2.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 96.10 cfs @ 12.09 hrs, Volume= 6.599 af, Depth> 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	1,104,468	84	Landfill
	17,192	98	Paved parking, HSG C
	1,752	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,104,468		98.31% Pervious Area
	18,944		1.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 254.05 cfs @ 12.09 hrs, Volume= 17.127 af, Depth> 2.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	2,371,130	84	Landfill
	370,972	98	Paved parking, HSG C
	423,665	68	<50% Grass cover, Poor, HSG A
	634,408	36	Woods, Fair, HSG A
	3,800,175	76	Weighted Average
	3,429,203		90.24% Pervious Area
	370,972		9.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 34.06 cfs @ 12.09 hrs, Volume= 2.308 af, Depth> 2.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	399,079	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	36	Woods, Fair, HSG A
	446,490	80	Weighted Average
	436,105		97.67% Pervious Area
	10,385		2.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 0.00% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 44.49 cfs @ 12.09 hrs, Volume= 3.055 af
Primary = 44.49 cfs @ 12.09 hrs, Volume= 3.055 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 1.51% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 51.31 cfs @ 12.09 hrs, Volume= 3.523 af
Primary = 51.31 cfs @ 12.09 hrs, Volume= 3.523 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 2.86% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 73.08 cfs @ 12.09 hrs, Volume= 5.017 af
Primary = 73.08 cfs @ 12.09 hrs, Volume= 5.017 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.69% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 96.10 cfs @ 12.09 hrs, Volume= 6.599 af
Primary = 96.10 cfs @ 12.09 hrs, Volume= 6.599 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 9.76% Impervious, Inflow Depth > 2.36" for 10-Year event
Inflow = 254.05 cfs @ 12.09 hrs, Volume= 17.127 af
Primary = 254.05 cfs @ 12.09 hrs, Volume= 17.127 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 2.33% Impervious, Inflow Depth > 2.70" for 10-Year event
Inflow = 34.06 cfs @ 12.09 hrs, Volume= 2.308 af
Primary = 34.06 cfs @ 12.09 hrs, Volume= 2.308 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,106 sf 0.00% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=84 Runoff=51.75 cfs 3.578 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 1.51% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=84 Runoff=59.69 cfs 4.126 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 2.86% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=84 Runoff=85.00 cfs 5.876 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.69% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=84 Runoff=111.79 cfs 7.728 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,175 sf 9.76% Impervious Runoff Depth>2.83"
Tc=6.0 min CN=76 Runoff=304.66 cfs 20.576 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 2.33% Impervious Runoff Depth>3.20"
Tc=6.0 min CN=80 Runoff=40.19 cfs 2.737 af

Link DP-1: DP-1 Inflow=51.75 cfs 3.578 af
Primary=51.75 cfs 3.578 af

Link DP-2: DP-2 Inflow=59.69 cfs 4.126 af
Primary=59.69 cfs 4.126 af

Link DP-3: DP-3 Inflow=85.00 cfs 5.876 af
Primary=85.00 cfs 5.876 af

Link DP-4: DP-4 Inflow=111.79 cfs 7.728 af
Primary=111.79 cfs 7.728 af

Link DP-5: DP-5 Inflow=304.66 cfs 20.576 af
Primary=304.66 cfs 20.576 af

Link DP-6: DP-6 Inflow=40.19 cfs 2.737 af
Primary=40.19 cfs 2.737 af

Total Runoff Area = 168.600 ac Runoff Volume = 44.622 af Average Runoff Depth = 3.18"
94.09% Pervious = 158.642 ac 5.91% Impervious = 9.958 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 51.75 cfs @ 12.09 hrs, Volume= 3.578 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	520,106	84	Landfill
	520,106		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 59.69 cfs @ 12.09 hrs, Volume= 4.126 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	590,788	84	Landfill
	9,033	98	Paved parking, HSG C
	599,821	84	Weighted Average
	590,788		98.49% Pervious Area
	9,033		1.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 85.00 cfs @ 12.09 hrs, Volume= 5.876 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	829,754	84	Landfill
	24,457	98	Paved parking, HSG C
	854,211	84	Weighted Average
	829,754		97.14% Pervious Area
	24,457		2.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 111.79 cfs @ 12.09 hrs, Volume= 7.728 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	1,104,468	84	Landfill
	17,192	98	Paved parking, HSG C
	1,752	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,104,468		98.31% Pervious Area
	18,944		1.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 304.66 cfs @ 12.09 hrs, Volume= 20.576 af, Depth> 2.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	2,371,130	84	Landfill
	370,972	98	Paved parking, HSG C
	423,665	68	<50% Grass cover, Poor, HSG A
	634,408	36	Woods, Fair, HSG A
	3,800,175	76	Weighted Average
	3,429,203		90.24% Pervious Area
	370,972		9.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 40.19 cfs @ 12.09 hrs, Volume= 2.737 af, Depth> 3.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	399,079	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	36	Woods, Fair, HSG A
	446,490	80	Weighted Average
	436,105		97.67% Pervious Area
	10,385		2.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 0.00% Impervious, Inflow Depth > 3.60" for 25-Year event
Inflow = 51.75 cfs @ 12.09 hrs, Volume= 3.578 af
Primary = 51.75 cfs @ 12.09 hrs, Volume= 3.578 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 1.51% Impervious, Inflow Depth > 3.60" for 25-Year event
Inflow = 59.69 cfs @ 12.09 hrs, Volume= 4.126 af
Primary = 59.69 cfs @ 12.09 hrs, Volume= 4.126 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 2.86% Impervious, Inflow Depth > 3.60" for 25-Year event
Inflow = 85.00 cfs @ 12.09 hrs, Volume= 5.876 af
Primary = 85.00 cfs @ 12.09 hrs, Volume= 5.876 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.69% Impervious, Inflow Depth > 3.60" for 25-Year event
Inflow = 111.79 cfs @ 12.09 hrs, Volume= 7.728 af
Primary = 111.79 cfs @ 12.09 hrs, Volume= 7.728 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 9.76% Impervious, Inflow Depth > 2.83" for 25-Year event
Inflow = 304.66 cfs @ 12.09 hrs, Volume= 20.576 af
Primary = 304.66 cfs @ 12.09 hrs, Volume= 20.576 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 2.33% Impervious, Inflow Depth > 3.20" for 25-Year event
Inflow = 40.19 cfs @ 12.09 hrs, Volume= 2.737 af
Primary = 40.19 cfs @ 12.09 hrs, Volume= 2.737 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,106 sf 0.00% Impervious Runoff Depth>4.94"
Tc=6.0 min CN=84 Runoff=69.94 cfs 4.914 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 1.51% Impervious Runoff Depth>4.94"
Tc=6.0 min CN=84 Runoff=80.65 cfs 5.668 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 2.86% Impervious Runoff Depth>4.94"
Tc=6.0 min CN=84 Runoff=114.86 cfs 8.071 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.69% Impervious Runoff Depth>4.94"
Tc=6.0 min CN=84 Runoff=151.06 cfs 10.615 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,175 sf 9.76% Impervious Runoff Depth>4.07"
Tc=6.0 min CN=76 Runoff=434.39 cfs 29.586 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 2.33% Impervious Runoff Depth>4.50"
Tc=6.0 min CN=80 Runoff=55.71 cfs 3.843 af

Link DP-1: DP-1 Inflow=69.94 cfs 4.914 af
Primary=69.94 cfs 4.914 af

Link DP-2: DP-2 Inflow=80.65 cfs 5.668 af
Primary=80.65 cfs 5.668 af

Link DP-3: DP-3 Inflow=114.86 cfs 8.071 af
Primary=114.86 cfs 8.071 af

Link DP-4: DP-4 Inflow=151.06 cfs 10.615 af
Primary=151.06 cfs 10.615 af

Link DP-5: DP-5 Inflow=434.39 cfs 29.586 af
Primary=434.39 cfs 29.586 af

Link DP-6: DP-6 Inflow=55.71 cfs 3.843 af
Primary=55.71 cfs 3.843 af

Total Runoff Area = 168.600 ac Runoff Volume = 62.697 af Average Runoff Depth = 4.46"
94.09% Pervious = 158.642 ac 5.91% Impervious = 9.958 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 69.94 cfs @ 12.09 hrs, Volume= 4.914 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	520,106	84	Landfill
	520,106		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 80.65 cfs @ 12.09 hrs, Volume= 5.668 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	590,788	84	Landfill
	9,033	98	Paved parking, HSG C
	599,821	84	Weighted Average
	590,788		98.49% Pervious Area
	9,033		1.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 114.86 cfs @ 12.09 hrs, Volume= 8.071 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	829,754	84	Landfill
	24,457	98	Paved parking, HSG C
	854,211	84	Weighted Average
	829,754		97.14% Pervious Area
	24,457		2.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 151.06 cfs @ 12.09 hrs, Volume= 10.615 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	1,104,468	84	Landfill
	17,192	98	Paved parking, HSG C
	1,752	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,104,468		98.31% Pervious Area
	18,944		1.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 434.39 cfs @ 12.09 hrs, Volume= 29.586 af, Depth> 4.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	2,371,130	84	Landfill
	370,972	98	Paved parking, HSG C
	423,665	68	<50% Grass cover, Poor, HSG A
	634,408	36	Woods, Fair, HSG A
	3,800,175	76	Weighted Average
	3,429,203		90.24% Pervious Area
	370,972		9.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 55.71 cfs @ 12.09 hrs, Volume= 3.843 af, Depth> 4.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	399,079	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	36	Woods, Fair, HSG A
	446,490	80	Weighted Average
	436,105		97.67% Pervious Area
	10,385		2.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 0.00% Impervious, Inflow Depth > 4.94" for 100-Year event
Inflow = 69.94 cfs @ 12.09 hrs, Volume= 4.914 af
Primary = 69.94 cfs @ 12.09 hrs, Volume= 4.914 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 1.51% Impervious, Inflow Depth > 4.94" for 100-Year event
Inflow = 80.65 cfs @ 12.09 hrs, Volume= 5.668 af
Primary = 80.65 cfs @ 12.09 hrs, Volume= 5.668 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 2.86% Impervious, Inflow Depth > 4.94" for 100-Year event
Inflow = 114.86 cfs @ 12.09 hrs, Volume= 8.071 af
Primary = 114.86 cfs @ 12.09 hrs, Volume= 8.071 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.69% Impervious, Inflow Depth > 4.94" for 100-Year event
Inflow = 151.06 cfs @ 12.09 hrs, Volume= 10.615 af
Primary = 151.06 cfs @ 12.09 hrs, Volume= 10.615 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 9.76% Impervious, Inflow Depth > 4.07" for 100-Year event
Inflow = 434.39 cfs @ 12.09 hrs, Volume= 29.586 af
Primary = 434.39 cfs @ 12.09 hrs, Volume= 29.586 af, Atten= 0%, Lag= 0.0 min

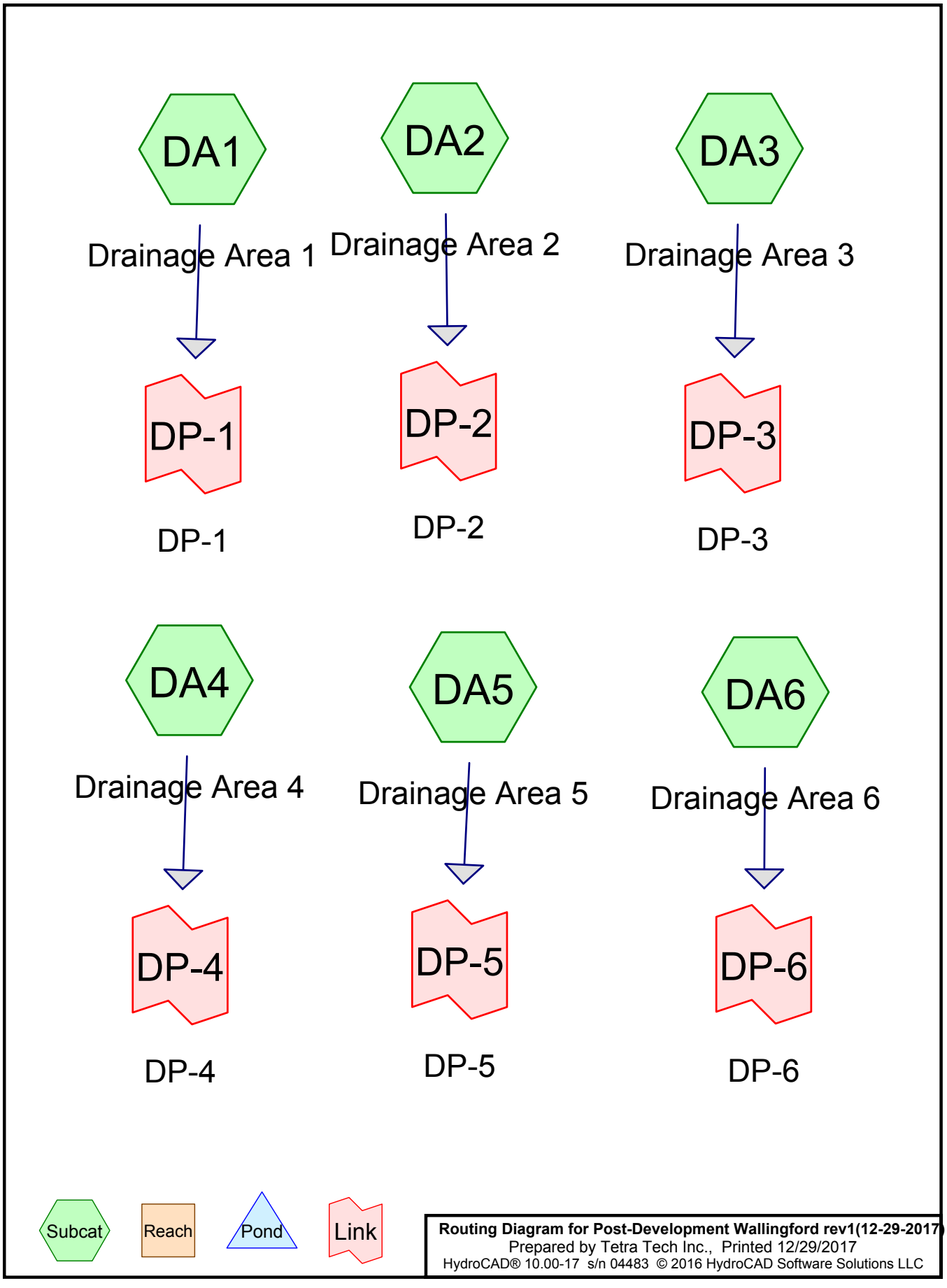
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 2.33% Impervious, Inflow Depth > 4.50" for 100-Year event
Inflow = 55.71 cfs @ 12.09 hrs, Volume= 3.843 af
Primary = 55.71 cfs @ 12.09 hrs, Volume= 3.843 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

APPENDIX H
POST-DEVELOPMENT DRAINAGE ANALYSIS



Routing Diagram for Post-Development Wallingford rev1(12-29-2017)
Prepared by Tetra Tech Inc., Printed 12/29/2017

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,107 sf 1.76% Impervious Runoff Depth>1.18"
Tc=6.0 min CN=84 Runoff=17.41 cfs 1.174 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 0.65% Impervious Runoff Depth>1.18"
Tc=6.0 min CN=84 Runoff=20.08 cfs 1.354 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 0.45% Impervious Runoff Depth>1.18"
Tc=6.0 min CN=84 Runoff=28.59 cfs 1.928 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.60% Impervious Runoff Depth>1.18"
Tc=6.0 min CN=84 Runoff=37.60 cfs 2.535 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,174 sf 10.19% Impervious Runoff Depth>0.61"
Tc=6.0 min CN=73 Runoff=60.75 cfs 4.451 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 3.01% Impervious Runoff Depth>1.00"
Tc=6.0 min CN=81 Runoff=12.60 cfs 0.855 af

Link DP-1: DP-1 Inflow=17.41 cfs 1.174 af
Primary=17.41 cfs 1.174 af

Link DP-2: DP-2 Inflow=20.08 cfs 1.354 af
Primary=20.08 cfs 1.354 af

Link DP-3: DP-3 Inflow=28.59 cfs 1.928 af
Primary=28.59 cfs 1.928 af

Link DP-4: DP-4 Inflow=37.60 cfs 2.535 af
Primary=37.60 cfs 2.535 af

Link DP-5: DP-5 Inflow=60.75 cfs 4.451 af
Primary=60.75 cfs 4.451 af

Link DP-6: DP-6 Inflow=12.60 cfs 0.855 af
Primary=12.60 cfs 0.855 af

Total Runoff Area = 168.600 ac Runoff Volume = 12.296 af Average Runoff Depth = 0.88"
94.07% Pervious = 158.604 ac 5.93% Impervious = 9.996 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 17.41 cfs @ 12.09 hrs, Volume= 1.174 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	510,959	84	Landfill
	9,148	98	Paved parking, HSG C
	520,107	84	Weighted Average
	510,959		98.24% Pervious Area
	9,148		1.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 20.08 cfs @ 12.09 hrs, Volume= 1.354 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	595,901	84	Landfill
	3,920	98	Paved parking, HSG C
	599,821	84	Weighted Average
	595,901		99.35% Pervious Area
	3,920		0.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 28.59 cfs @ 12.09 hrs, Volume= 1.928 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	850,378	84	Landfill
	3,833	98	Paved parking, HSG C
	854,211	84	Weighted Average
	850,378		99.55% Pervious Area
	3,833		0.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 37.60 cfs @ 12.09 hrs, Volume= 2.535 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	1,105,392	84	Landfill
	17,192	98	Paved parking, HSG C
	828	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,105,392		98.40% Pervious Area
	18,020		1.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 60.75 cfs @ 12.10 hrs, Volume= 4.451 af, Depth> 0.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	2,355,013	84	Landfill
	370,972	98	Paved parking, HSG C
	1,058,072	39	>75% Grass cover, Good, HSG A
	16,117	98	Paved parking, HSG A
	3,800,174	73	Weighted Average
	3,413,085		89.81% Pervious Area
	387,089		10.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 12.60 cfs @ 12.10 hrs, Volume= 0.855 af, Depth> 1.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	396,030	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	39	>75% Grass cover, Good, HSG A
	3,049	98	Paved parking, HSG A
	446,490	81	Weighted Average
	433,056		96.99% Pervious Area
	13,434		3.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 1.76% Impervious, Inflow Depth > 1.18" for 1-Year event
Inflow = 17.41 cfs @ 12.09 hrs, Volume= 1.174 af
Primary = 17.41 cfs @ 12.09 hrs, Volume= 1.174 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 0.65% Impervious, Inflow Depth > 1.18" for 1-Year event
Inflow = 20.08 cfs @ 12.09 hrs, Volume= 1.354 af
Primary = 20.08 cfs @ 12.09 hrs, Volume= 1.354 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 0.45% Impervious, Inflow Depth > 1.18" for 1-Year event
Inflow = 28.59 cfs @ 12.09 hrs, Volume= 1.928 af
Primary = 28.59 cfs @ 12.09 hrs, Volume= 1.928 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.60% Impervious, Inflow Depth > 1.18" for 1-Year event
Inflow = 37.60 cfs @ 12.09 hrs, Volume= 2.535 af
Primary = 37.60 cfs @ 12.09 hrs, Volume= 2.535 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 10.19% Impervious, Inflow Depth > 0.61" for 1-Year event
Inflow = 60.75 cfs @ 12.10 hrs, Volume= 4.451 af
Primary = 60.75 cfs @ 12.10 hrs, Volume= 4.451 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 3.01% Impervious, Inflow Depth > 1.00" for 1-Year event
Inflow = 12.60 cfs @ 12.10 hrs, Volume= 0.855 af
Primary = 12.60 cfs @ 12.10 hrs, Volume= 0.855 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,107 sf 1.76% Impervious Runoff Depth>1.64"
Tc=6.0 min CN=84 Runoff=24.25 cfs 1.637 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 0.65% Impervious Runoff Depth>1.64"
Tc=6.0 min CN=84 Runoff=27.96 cfs 1.887 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 0.45% Impervious Runoff Depth>1.64"
Tc=6.0 min CN=84 Runoff=39.82 cfs 2.688 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.60% Impervious Runoff Depth>1.64"
Tc=6.0 min CN=84 Runoff=52.37 cfs 3.535 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,174 sf 10.19% Impervious Runoff Depth>0.95"
Tc=6.0 min CN=73 Runoff=99.49 cfs 6.937 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 3.01% Impervious Runoff Depth>1.43"
Tc=6.0 min CN=81 Runoff=18.16 cfs 1.225 af

Link DP-1: DP-1 Inflow=24.25 cfs 1.637 af
Primary=24.25 cfs 1.637 af

Link DP-2: DP-2 Inflow=27.96 cfs 1.887 af
Primary=27.96 cfs 1.887 af

Link DP-3: DP-3 Inflow=39.82 cfs 2.688 af
Primary=39.82 cfs 2.688 af

Link DP-4: DP-4 Inflow=52.37 cfs 3.535 af
Primary=52.37 cfs 3.535 af

Link DP-5: DP-5 Inflow=99.49 cfs 6.937 af
Primary=99.49 cfs 6.937 af

Link DP-6: DP-6 Inflow=18.16 cfs 1.225 af
Primary=18.16 cfs 1.225 af

Total Runoff Area = 168.600 ac Runoff Volume = 17.909 af Average Runoff Depth = 1.27"
94.07% Pervious = 158.604 ac 5.93% Impervious = 9.996 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 24.25 cfs @ 12.09 hrs, Volume= 1.637 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	510,959	84	Landfill
	9,148	98	Paved parking, HSG C
	520,107	84	Weighted Average
	510,959		98.24% Pervious Area
	9,148		1.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 27.96 cfs @ 12.09 hrs, Volume= 1.887 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	595,901	84	Landfill
	3,920	98	Paved parking, HSG C
	599,821	84	Weighted Average
	595,901		99.35% Pervious Area
	3,920		0.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 39.82 cfs @ 12.09 hrs, Volume= 2.688 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	850,378	84	Landfill
	3,833	98	Paved parking, HSG C
	854,211	84	Weighted Average
	850,378		99.55% Pervious Area
	3,833		0.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 52.37 cfs @ 12.09 hrs, Volume= 3.535 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	1,105,392	84	Landfill
	17,192	98	Paved parking, HSG C
	828	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,105,392		98.40% Pervious Area
	18,020		1.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 99.49 cfs @ 12.10 hrs, Volume= 6.937 af, Depth> 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	2,355,013	84	Landfill
	370,972	98	Paved parking, HSG C
	1,058,072	39	>75% Grass cover, Good, HSG A
	16,117	98	Paved parking, HSG A
	3,800,174	73	Weighted Average
	3,413,085		89.81% Pervious Area
	387,089		10.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 18.16 cfs @ 12.09 hrs, Volume= 1.225 af, Depth> 1.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
*	396,030	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	39	>75% Grass cover, Good, HSG A
	3,049	98	Paved parking, HSG A
	446,490	81	Weighted Average
	433,056		96.99% Pervious Area
	13,434		3.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 1.76% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 24.25 cfs @ 12.09 hrs, Volume= 1.637 af
Primary = 24.25 cfs @ 12.09 hrs, Volume= 1.637 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 0.65% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 27.96 cfs @ 12.09 hrs, Volume= 1.887 af
Primary = 27.96 cfs @ 12.09 hrs, Volume= 1.887 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 0.45% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 39.82 cfs @ 12.09 hrs, Volume= 2.688 af
Primary = 39.82 cfs @ 12.09 hrs, Volume= 2.688 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.60% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 52.37 cfs @ 12.09 hrs, Volume= 3.535 af
Primary = 52.37 cfs @ 12.09 hrs, Volume= 3.535 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 10.19% Impervious, Inflow Depth > 0.95" for 2-Year event
Inflow = 99.49 cfs @ 12.10 hrs, Volume= 6.937 af
Primary = 99.49 cfs @ 12.10 hrs, Volume= 6.937 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 3.01% Impervious, Inflow Depth > 1.43" for 2-Year event
Inflow = 18.16 cfs @ 12.09 hrs, Volume= 1.225 af
Primary = 18.16 cfs @ 12.09 hrs, Volume= 1.225 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,107 sf 1.76% Impervious Runoff Depth>3.07"
Tc=6.0 min CN=84 Runoff=44.49 cfs 3.055 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 0.65% Impervious Runoff Depth>3.07"
Tc=6.0 min CN=84 Runoff=51.31 cfs 3.523 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 0.45% Impervious Runoff Depth>3.07"
Tc=6.0 min CN=84 Runoff=73.08 cfs 5.017 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.60% Impervious Runoff Depth>3.07"
Tc=6.0 min CN=84 Runoff=96.10 cfs 6.599 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,174 sf 10.19% Impervious Runoff Depth>2.11"
Tc=6.0 min CN=73 Runoff=227.34 cfs 15.338 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 3.01% Impervious Runoff Depth>2.79"
Tc=6.0 min CN=81 Runoff=35.10 cfs 2.385 af

Link DP-1: DP-1 Inflow=44.49 cfs 3.055 af
Primary=44.49 cfs 3.055 af

Link DP-2: DP-2 Inflow=51.31 cfs 3.523 af
Primary=51.31 cfs 3.523 af

Link DP-3: DP-3 Inflow=73.08 cfs 5.017 af
Primary=73.08 cfs 5.017 af

Link DP-4: DP-4 Inflow=96.10 cfs 6.599 af
Primary=96.10 cfs 6.599 af

Link DP-5: DP-5 Inflow=227.34 cfs 15.338 af
Primary=227.34 cfs 15.338 af

Link DP-6: DP-6 Inflow=35.10 cfs 2.385 af
Primary=35.10 cfs 2.385 af

Total Runoff Area = 168.600 ac Runoff Volume = 35.917 af Average Runoff Depth = 2.56"
94.07% Pervious = 158.604 ac 5.93% Impervious = 9.996 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 44.49 cfs @ 12.09 hrs, Volume= 3.055 af, Depth> 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	510,959	84	Landfill
	9,148	98	Paved parking, HSG C
	520,107	84	Weighted Average
	510,959		98.24% Pervious Area
	9,148		1.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 51.31 cfs @ 12.09 hrs, Volume= 3.523 af, Depth> 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	595,901	84	Landfill
	3,920	98	Paved parking, HSG C
	599,821	84	Weighted Average
	595,901		99.35% Pervious Area
	3,920		0.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 73.08 cfs @ 12.09 hrs, Volume= 5.017 af, Depth> 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	850,378	84	Landfill
	3,833	98	Paved parking, HSG C
	854,211	84	Weighted Average
	850,378		99.55% Pervious Area
	3,833		0.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 96.10 cfs @ 12.09 hrs, Volume= 6.599 af, Depth> 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	1,105,392	84	Landfill
	17,192	98	Paved parking, HSG C
	828	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,105,392		98.40% Pervious Area
	18,020		1.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 227.34 cfs @ 12.10 hrs, Volume= 15.338 af, Depth> 2.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	2,355,013	84	Landfill
	370,972	98	Paved parking, HSG C
	1,058,072	39	>75% Grass cover, Good, HSG A
	16,117	98	Paved parking, HSG A
	3,800,174	73	Weighted Average
	3,413,085		89.81% Pervious Area
	387,089		10.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 35.10 cfs @ 12.09 hrs, Volume= 2.385 af, Depth> 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.00"

	Area (sf)	CN	Description
*	396,030	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	39	>75% Grass cover, Good, HSG A
	3,049	98	Paved parking, HSG A
	446,490	81	Weighted Average
	433,056		96.99% Pervious Area
	13,434		3.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 1.76% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 44.49 cfs @ 12.09 hrs, Volume= 3.055 af
Primary = 44.49 cfs @ 12.09 hrs, Volume= 3.055 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 0.65% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 51.31 cfs @ 12.09 hrs, Volume= 3.523 af
Primary = 51.31 cfs @ 12.09 hrs, Volume= 3.523 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 0.45% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 73.08 cfs @ 12.09 hrs, Volume= 5.017 af
Primary = 73.08 cfs @ 12.09 hrs, Volume= 5.017 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.60% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 96.10 cfs @ 12.09 hrs, Volume= 6.599 af
Primary = 96.10 cfs @ 12.09 hrs, Volume= 6.599 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 10.19% Impervious, Inflow Depth > 2.11" for 10-Year event
Inflow = 227.34 cfs @ 12.10 hrs, Volume= 15.338 af
Primary = 227.34 cfs @ 12.10 hrs, Volume= 15.338 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 3.01% Impervious, Inflow Depth > 2.79" for 10-Year event
Inflow = 35.10 cfs @ 12.09 hrs, Volume= 2.385 af
Primary = 35.10 cfs @ 12.09 hrs, Volume= 2.385 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,107 sf 1.76% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=84 Runoff=51.75 cfs 3.578 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 0.65% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=84 Runoff=59.69 cfs 4.126 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 0.45% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=84 Runoff=85.00 cfs 5.876 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.60% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=84 Runoff=111.79 cfs 7.728 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,174 sf 10.19% Impervious Runoff Depth>2.56"
Tc=6.0 min CN=73 Runoff=276.28 cfs 18.622 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 3.01% Impervious Runoff Depth>3.30"
Tc=6.0 min CN=81 Runoff=41.27 cfs 2.819 af

Link DP-1: DP-1 Inflow=51.75 cfs 3.578 af
Primary=51.75 cfs 3.578 af

Link DP-2: DP-2 Inflow=59.69 cfs 4.126 af
Primary=59.69 cfs 4.126 af

Link DP-3: DP-3 Inflow=85.00 cfs 5.876 af
Primary=85.00 cfs 5.876 af

Link DP-4: DP-4 Inflow=111.79 cfs 7.728 af
Primary=111.79 cfs 7.728 af

Link DP-5: DP-5 Inflow=276.28 cfs 18.622 af
Primary=276.28 cfs 18.622 af

Link DP-6: DP-6 Inflow=41.27 cfs 2.819 af
Primary=41.27 cfs 2.819 af

Total Runoff Area = 168.600 ac Runoff Volume = 42.750 af Average Runoff Depth = 3.04"
94.07% Pervious = 158.604 ac 5.93% Impervious = 9.996 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 51.75 cfs @ 12.09 hrs, Volume= 3.578 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	510,959	84	Landfill
	9,148	98	Paved parking, HSG C
	520,107	84	Weighted Average
	510,959		98.24% Pervious Area
	9,148		1.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 59.69 cfs @ 12.09 hrs, Volume= 4.126 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	595,901	84	Landfill
	3,920	98	Paved parking, HSG C
	599,821	84	Weighted Average
	595,901		99.35% Pervious Area
	3,920		0.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 85.00 cfs @ 12.09 hrs, Volume= 5.876 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	850,378	84	Landfill
	3,833	98	Paved parking, HSG C
	854,211	84	Weighted Average
	850,378		99.55% Pervious Area
	3,833		0.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 111.79 cfs @ 12.09 hrs, Volume= 7.728 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	1,105,392	84	Landfill
	17,192	98	Paved parking, HSG C
	828	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,105,392		98.40% Pervious Area
	18,020		1.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 276.28 cfs @ 12.09 hrs, Volume= 18.622 af, Depth> 2.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	2,355,013	84	Landfill
	370,972	98	Paved parking, HSG C
	1,058,072	39	>75% Grass cover, Good, HSG A
	16,117	98	Paved parking, HSG A
	3,800,174	73	Weighted Average
	3,413,085		89.81% Pervious Area
	387,089		10.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 41.27 cfs @ 12.09 hrs, Volume= 2.819 af, Depth> 3.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.60"

	Area (sf)	CN	Description
*	396,030	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	39	>75% Grass cover, Good, HSG A
	3,049	98	Paved parking, HSG A
	446,490	81	Weighted Average
	433,056		96.99% Pervious Area
	13,434		3.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 1.76% Impervious, Inflow Depth > 3.60" for 25-Year event
Inflow = 51.75 cfs @ 12.09 hrs, Volume= 3.578 af
Primary = 51.75 cfs @ 12.09 hrs, Volume= 3.578 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 0.65% Impervious, Inflow Depth > 3.60" for 25-Year event
Inflow = 59.69 cfs @ 12.09 hrs, Volume= 4.126 af
Primary = 59.69 cfs @ 12.09 hrs, Volume= 4.126 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 0.45% Impervious, Inflow Depth > 3.60" for 25-Year event
Inflow = 85.00 cfs @ 12.09 hrs, Volume= 5.876 af
Primary = 85.00 cfs @ 12.09 hrs, Volume= 5.876 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.60% Impervious, Inflow Depth > 3.60" for 25-Year event
Inflow = 111.79 cfs @ 12.09 hrs, Volume= 7.728 af
Primary = 111.79 cfs @ 12.09 hrs, Volume= 7.728 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 10.19% Impervious, Inflow Depth > 2.56" for 25-Year event
Inflow = 276.28 cfs @ 12.09 hrs, Volume= 18.622 af
Primary = 276.28 cfs @ 12.09 hrs, Volume= 18.622 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 3.01% Impervious, Inflow Depth > 3.30" for 25-Year event
Inflow = 41.27 cfs @ 12.09 hrs, Volume= 2.819 af
Primary = 41.27 cfs @ 12.09 hrs, Volume= 2.819 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: Drainage Area 1 Runoff Area=520,107 sf 1.76% Impervious Runoff Depth>4.94"
Tc=6.0 min CN=84 Runoff=69.94 cfs 4.914 af

Subcatchment DA2: Drainage Area 2 Runoff Area=599,821 sf 0.65% Impervious Runoff Depth>4.94"
Tc=6.0 min CN=84 Runoff=80.65 cfs 5.668 af

Subcatchment DA3: Drainage Area 3 Runoff Area=854,211 sf 0.45% Impervious Runoff Depth>4.94"
Tc=6.0 min CN=84 Runoff=114.86 cfs 8.071 af

Subcatchment DA4: Drainage Area 4 Runoff Area=1,123,412 sf 1.60% Impervious Runoff Depth>4.94"
Tc=6.0 min CN=84 Runoff=151.06 cfs 10.615 af

Subcatchment DA5: Drainage Area 5 Runoff Area=3,800,174 sf 10.19% Impervious Runoff Depth>3.75"
Tc=6.0 min CN=73 Runoff=403.16 cfs 27.288 af

Subcatchment DA6: Drainage Area 6 Runoff Area=446,490 sf 3.01% Impervious Runoff Depth>4.61"
Tc=6.0 min CN=81 Runoff=56.83 cfs 3.937 af

Link DP-1: DP-1 Inflow=69.94 cfs 4.914 af
Primary=69.94 cfs 4.914 af

Link DP-2: DP-2 Inflow=80.65 cfs 5.668 af
Primary=80.65 cfs 5.668 af

Link DP-3: DP-3 Inflow=114.86 cfs 8.071 af
Primary=114.86 cfs 8.071 af

Link DP-4: DP-4 Inflow=151.06 cfs 10.615 af
Primary=151.06 cfs 10.615 af

Link DP-5: DP-5 Inflow=403.16 cfs 27.288 af
Primary=403.16 cfs 27.288 af

Link DP-6: DP-6 Inflow=56.83 cfs 3.937 af
Primary=56.83 cfs 3.937 af

Total Runoff Area = 168.600 ac Runoff Volume = 60.493 af Average Runoff Depth = 4.31"
94.07% Pervious = 158.604 ac 5.93% Impervious = 9.996 ac

Summary for Subcatchment DA1: Drainage Area 1

Runoff = 69.94 cfs @ 12.09 hrs, Volume= 4.914 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	510,959	84	Landfill
	9,148	98	Paved parking, HSG C
	520,107	84	Weighted Average
	510,959		98.24% Pervious Area
	9,148		1.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA2: Drainage Area 2

Runoff = 80.65 cfs @ 12.09 hrs, Volume= 5.668 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	595,901	84	Landfill
	3,920	98	Paved parking, HSG C
	599,821	84	Weighted Average
	595,901		99.35% Pervious Area
	3,920		0.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA3: Drainage Area 3

Runoff = 114.86 cfs @ 12.09 hrs, Volume= 8.071 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	850,378	84	Landfill
	3,833	98	Paved parking, HSG C
	854,211	84	Weighted Average
	850,378		99.55% Pervious Area
	3,833		0.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA4: Drainage Area 4

Runoff = 151.06 cfs @ 12.09 hrs, Volume= 10.615 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	1,105,392	84	Landfill
	17,192	98	Paved parking, HSG C
	828	98	Paved parking, HSG C
	1,123,412	84	Weighted Average
	1,105,392		98.40% Pervious Area
	18,020		1.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA5: Drainage Area 5

Runoff = 403.16 cfs @ 12.09 hrs, Volume= 27.288 af, Depth> 3.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	2,355,013	84	Landfill
	370,972	98	Paved parking, HSG C
	1,058,072	39	>75% Grass cover, Good, HSG A
	16,117	98	Paved parking, HSG A
	3,800,174	73	Weighted Average
	3,413,085		89.81% Pervious Area
	387,089		10.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DA6: Drainage Area 6

Runoff = 56.83 cfs @ 12.09 hrs, Volume= 3.937 af, Depth> 4.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.10"

	Area (sf)	CN	Description
*	396,030	84	Landfill
	10,385	98	Paved parking, HSG C
	37,026	39	>75% Grass cover, Good, HSG A
	3,049	98	Paved parking, HSG A
	446,490	81	Weighted Average
	433,056		96.99% Pervious Area
	13,434		3.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Link DP-1: DP-1

Inflow Area = 11.940 ac, 1.76% Impervious, Inflow Depth > 4.94" for 100-Year event
Inflow = 69.94 cfs @ 12.09 hrs, Volume= 4.914 af
Primary = 69.94 cfs @ 12.09 hrs, Volume= 4.914 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: DP-2

Inflow Area = 13.770 ac, 0.65% Impervious, Inflow Depth > 4.94" for 100-Year event
Inflow = 80.65 cfs @ 12.09 hrs, Volume= 5.668 af
Primary = 80.65 cfs @ 12.09 hrs, Volume= 5.668 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: DP-3

Inflow Area = 19.610 ac, 0.45% Impervious, Inflow Depth > 4.94" for 100-Year event
Inflow = 114.86 cfs @ 12.09 hrs, Volume= 8.071 af
Primary = 114.86 cfs @ 12.09 hrs, Volume= 8.071 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-4: DP-4

Inflow Area = 25.790 ac, 1.60% Impervious, Inflow Depth > 4.94" for 100-Year event
Inflow = 151.06 cfs @ 12.09 hrs, Volume= 10.615 af
Primary = 151.06 cfs @ 12.09 hrs, Volume= 10.615 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-5: DP-5

Inflow Area = 87.240 ac, 10.19% Impervious, Inflow Depth > 3.75" for 100-Year event
Inflow = 403.16 cfs @ 12.09 hrs, Volume= 27.288 af
Primary = 403.16 cfs @ 12.09 hrs, Volume= 27.288 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link DP-6: DP-6

Inflow Area = 10.250 ac, 3.01% Impervious, Inflow Depth > 4.61" for 100-Year event
Inflow = 56.83 cfs @ 12.09 hrs, Volume= 3.937 af
Primary = 56.83 cfs @ 12.09 hrs, Volume= 3.937 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

APPENDIX I
GENERAL PERMIT REGISTRATION FORM FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FORM CONSTRUCTION ACTIVITIES

Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

General Permit Registration Form for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 (non-electronic form)

Prior to completing this form, you **must** read the instructions for the subject general permit available at **DEEP-WPED-INST-015**.
This form must be filled out electronically before being printed.
You must submit the registration fee along with this form.

The status of your registration can be checked on the DEEP's ezFile Portal. Please note that DEEP will no longer mail certificates of registration.

CPPU USE ONLY
App #:_____
Doc #:_____
Check #:_____
Program: Stormwater

Part I: Registration Type

Select the appropriate boxes identifying the registration type and registration deadline.

Registration Type			Registration Timeline	
☐	**New Registration** (Refer to Section 2 of the permit for definitions of Locally Exempt and Locally Approvable Projects)	☐ Locally Approvable Projects ***Size of soil disturbance*:**	**New registration - Sixty (60) days prior to the initiation of the construction activity for:** Sites with a total soil disturbance area of 5 or more acres	
		☐ Locally Exempt Projects ***Size of soil disturbance*:**	☐	**New registration - Sixty (60) days prior to the initiation of the construction activity for:** Sites with a total disturbance area of one (1) to twenty (20) acres except those with discharges to impaired waters or tidal wetlands
			☐	**New registration - Ninety (90) days prior to the initiation of the construction activity for:** (i) Sites with a total soil disturbance area greater than twenty (20) acres, or (ii) Sites discharging to a tidal wetland (that is not fresh-tidal and is located within 500 feet), or (iii) Sites discharging to an impaired water listed in the "Impaired Waters Table for Construction Stormwater Discharges"

Part II: Fee Information

1. New Registrations
   a. Locally approvable projects (registration only):
      ☐ $625 [#1855]
   b. Locally exempt projects (registration and Plan):
      ☐ $3,000 total soil disturbance area ≥ one (1) and < twenty (20) acres. [#1856]
      ☐ $4,000 total soil disturbance ≥ twenty (20) acres and < fifty (50) acres. [#1857]
      ☐ $5,000 total soil disturbance ≥ fifty (50) acres. [#1858]

The fees for municipalities shall be half of those indicated in subsections 1.a., 1.b., and 2 above pursuant to section 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified in this subsection. The registration will not be processed without the fee. The fee shall be non-refundable and shall be paid by certified check or money order payable to the Department of Energy and Environmental Protection.

Part III: Registrant Information

- If a registrant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of the State. If applicable, the registrant's name shall be stated **exactly** as it is registered with the Secretary of the State. This information can be accessed at **CONCORD**.
- If a registrant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).

1. Registrant /Client Name:

   Registrant Type ⬇

   Secretary of the State business ID #:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Example:(xxx) xxx-xxxx

   Contact Person: Title:

   E-Mail:

   Additional Phone Number (if applicable): ext.

2. List billing contact, if different than the registrant:

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Contact Person: Title:

Part III: Registrant Information (continued)

3. List primary contact for departmental correspondence and inquiries, if different than the registrant:

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Site Phone: Emergency Phone:

   Contact Person: Title:

   Association (e.g. developer, general or site contractor, etc.):

4. List owner of the property on which the activity will take place, if different from registrant:

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Contact Person:

5. List developer, if different from registrant or primary contact:

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Contact Person: Title:

6. List general contractor, if different from registrant or primary contact:

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Site Phone: Off Hours Phone:

   Contact Person: Title:

7. List any engineer(s) or other consultant(s) employed or retained to assist in preparing the registration and/or Stormwater Pollution Control Plan. ☐ Please select if additional sheets are necessary, and label and attach them to this sheet.

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Contact Person: Title:

   Service Provided: Email:

8. List Reviewing Qualified Professional (for locally approvable projects only). This information must match the information provided in Part IX of this registration.

   Name: Contact Person:

   Mailing Address: Email:

   City/Town: State: Zip Code:

   Business Phone: ext.:

Part IV: Site Information

1. Site Name:
   Street Address or Description of Location:
   (if linear, project location should be the project begining point)
   City/Town: State: CT Zip Code:
   (use only one zip code)
   Longitude: -_ _._ _ _ _ _ Latitude: _ _._ _ _ _ _

   Brief Description of construction activity:

   Project Start Date (must be on or after the authorization date of this registration) : /
   Anticipated Completion Date: / *month/ yr)*
   (month/ yr)
   Normal working hours: to

2. MINING: Is the activity on the site in question part of mining operations (i.e. sand and gravel)? ☐ Yes ☐ No

   If yes, mining is not authorized by this general permit. You must submit the Registration Form for the General Permit for the Discharge of Stormwater Associated with Industrial Activity.

3. COMBINED OR SANITARY SEWER: Does all of the stormwater from the proposed activity discharge to a combined or sanitary sewer (i.e. a sewage treatment plant)? ☐ Yes ☐ No

   If yes, this activity is not regulated by this permit. Contact the Water Permitting & Enforcement Division at 860-424-3018.

4. INDIAN LANDS: Is or will the facility be located on federally recognized Indian lands ☐ Yes ☐ No

5. COASTAL BOUNDARY: Is the activity which is the subject of this registration located within the coastal boundary as delineated on DEEP approved coastal boundary maps ☐ Yes ☐ No

   The coastal boundaries fall within the following towns: Branford, Bridgeport, Chester, Clinton, Darien, Deep River, East Haven, East Lyme, Essex, Fairfield, Greenwich, Groton (City and Town), Old Lyme, Guilford, Hamden, Ledyard, Lyme, Madison, Milford, Montville, New London, New Haven, North Haven, Norwalk, Norwich, Old Saybrook, Orange, Preston, Shelton, Stamford, Stonington (Borough and Town), Stratford, Waterford, West Haven, Westbrook and Westport.

   If “yes”, and this registration is for a new authorization or a modification of an existing authorization where the physical footprint of the subject activity is modified, you must provide documentation the DEEP Office of Long Island Sound Programs or the local governing authority has issued a coastal site plan approval or determined the project is exempt from coastal site plan review. Provide this documentation with your registration as Attachment B. See guidance in Appendix D of the general permit. Information on the coastal boundary is available at the local town hall or at www.cteco.uconn.edu/map_catalog.asp. Additional DEEP Maps and Publications are available by contacting DEEP staff at 860-424-3555.

Part IV: Site Information (continued)

6. ENDANGERED OR THREATENED SPECIES:

In order to be eligible to register for this General Permit, each registrant must perform a self-assessment, obtain a limited one-year determination, or obtain a safe-harbor determination regarding threatened and endangered species. This may include the need to develop and implement a mitigation plan. While each alternative has different limitations, the alternatives are not mutually exclusive; a registrant may register for this General Permit using more than one alternative. See Appendix A of the General Permit. Each registrant must complete this section AND Attachment C to this Registration form and a registrant who does not or cannot do so is not eligible to register under this General Permit.

Each registrant must perform a review of the Department's Natural Diversity Database maps to determine if the site of the construction activity is located within or in proximity (within ¼ mile) to a shaded area.

a. Verify that I have completed Attachment C to this Registration Form. ☐ Yes

b. Provide the date the NDDB maps were reviewed: _____ Date of map should be **one** year or less than the submittal date of this application. Print a copy of the NDDB map you viewed since it must be submitted with this registration as part of Attacment C.

c. For a registrant using a limited one-year determination or safe harbor determination to register for this General Permit, provide the Department's Wildlife Divison NDDB identification number for any such determination: _____ _____ (The number is on the determination issued by the Department's Wildlife Divison).

For more information on threatened and endangered species requirements, refer to Appendix A and Section 3(b)(2) of this General Permit, visit the DEEP website at www.ct.gov/deep/nddbrequest or call the NDDB at 860-424-3011.

7. WILD AND SCENIC RIVERS: Is the proposed project within the watershed of a designated Wild and Scenic River? (See Appendix H for guidance) ☐ Yes ☐ No

8. AQUIFER PROTECTION AREAS: Is the site located within a mapped aquifer protection area www.ct.gov/deep/aquiferprotection as defined in section 22a-354h of the CT General Statutes? (For additional guidance, please refer to Appendix C of the General Permit) ☐ Yes ☐ No

9. CT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL: Is the activity in accordance with CT Guidelines for Erosion and Sediment Control and local erosion & sediment control ordinances, where applicable? ☐ Yes ☐ No

10. HISTORIC AND/OR ARCHAEOLOGICAL RESOURCES:
Verify that the site of the proposed activity been reviewed (using the process outlined in Appendix G of this permit) for historic and/or archaeological resources: ☐ Yes

a. The review indicates the proposed site does not have the potential for historic/ archaeological resources, OR ☐ Yes ☐ No

b. The review indicated historic and/ or archaeological resource potential exists and the proposed activity is being or has been reviewed by the Offices of Culture and Tourism, OR ☐ Yes ☐ No

c. The proposed activity has been reviewed and authorized under an Army Corps of Engineers Section 404 wetland permit. ☐ Yes ☐ No

11. CONSERVATION OR PRESERVATION RESTRICTION:
Is the property subject to a conservation or preservation restriction? ☐ Yes ☐ No

If Yes, proof of written notice of this registration to the holder of such restriction or a letter from the holder of such restriction verifying that this registration is in compliance with the terms of the restriction, must be submitted as Attachment D.

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO. A decimal format is required here. Directions on how to use CT ECO to find lat./long. and conversions can be found in Part V, Section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude	Latitude	
	Select One:	Select One:	Select One:	-__.______	__.______	Select One:
	Select One:	Select One:	Select One:	-__.______	__.______	Select One:
	Select One:	Select One:	Select One:	-__.______	__.______	Select One:
	Select One:	Select One:	Select One:	-__.______	__.______	Select One:
	Select One:	Select One:	Select One:	-__.______	__.______	Select One:

Table 2

Outfall #	a) For temporary and permanent outfalls, provide a start date. For temporary discharges, also provide a date the discharge will cease.	b) For the drainage area associated with each outfall: Effective Impervious Area Before Construction	c) For the drainage area associated with each outfall: Effective Impervious Area After Construction	d) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select "storm sewer or wetland" proceed to Part VI of the form. If you select "waterbody" proceed to next question)	e) For each outfall, does it discharge to any of the following towns: *Branford, Kent, Manchester, Meriden, North Branford, Norwalk, or Wilton?* (If no, proceed to Part VI of the form. If yes, proceed to next question.)	f) For each outfall, does it discharge to a "freshwater" or "salt water" ? (If you select "freshwater" proceed to Table 3. If you selected "salt water", proceed to Part VI of the form.)
	- mm/dd-mm/dd	sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
	- mm/dd-mm/dd	sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
	- mm/dd-mm/dd	sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
	- mm/dd-mm/dd	sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
	- mm/dd-mm/dd	sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
		total sq feet	**total sq feet**			

Part V: Stormwater Discharge Information (continued)

Table 3 Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site:			
Outfall #	a) What is your 305b ID # (water body ID #)? (Section 3.b, of the DEEP-WPED-INST-015, explains how to find this information)	b) Is your receiving water identified as a impaired water in the "Impaired Waters Table for Construction Stormwater Discharges"? If yes, proceed to next question. If no, proceed to Part VI: Pollution Control Plan.	c) Has any Total Maximum Daily Load (TMDL) been approved for the impaired water?
		☐ Y ☐ N	☐ Y ☐ N
		☐ Y ☐ N	☐ Y ☐ N
		☐ Y ☐ N	☐ Y ☐ N
		☐ Y ☐ N	☐ Y ☐ N
		☐ Y ☐ N	☐ Y ☐ N

Part V: Stormwater Discharge Information (continued)

Impaired waters: If you answered "yes" to Table 3, question b.,**verify** that the project's Pollution Control Plan (Plan) addresses the control measures below in Question 1 or 2, as appropriate.

1. **If the impaired water does not have a TMDL,** confirm compliance by selecting 1.a. or 1.b. below:
   a. No more than 3 acres is disturbed at any time; ☐ Yes

   OR

   b. Stormwater runoff from a 2 yr, 24 rain event is **retained.** ☐ Yes

2. **If the impaired water has a TMDL,** confirm compliance by selecting 2.a. and 2.b. below and either question 2.c.1. or 2.c.2. below:
   a. The Plan documents there is sufficient remaining Waste Load Allocations (WLA)in the TMDL for the proposed discharge, ☐ Yes

   AND

   b. Control measures shall be implemented to assure the WLA will not be exceeded, ☐ Yes

   AND

   c. 1. Stormwater discharges will be monitored for the indicator pollutant identified in theTMDL, ☐ Yes

   OR

   2. The Plan documents specific requirements for stormwater discharges specified in the TMDL. ☐ Yes

Part VI: Pollution Control Plan (select one of the following three categories)

☐ I am registering a Locally Exempt project and submitting the required electronic Plan (in Adobe™ PDF or similar publically available format) pursuant to Section 3(*c*)(2)(E) of this permit. (If you do not have the capability to submit the Plan electronically please call 860-418-5982).

- ☐ Plan is attached to this registration form
- ☐ Plan is available at the following Internet Address (URL):

☐ I am registering a Locally Approvable project and have chosen not to submit the Plan with this registration pursuant to Section 3(*c*)(1) of this permit.

☐ I am registering a Locally Approvable project and have chosen to make my Plan electronically available pursuant to Section 4(*c*)(2)(N) of this permit.

- ☐ Plan is attached to this registration form
- ☐ Plan is available at the following Internet Address (URL):

Part VII: Registrant Certification

The registrant *and* the individual(s) responsible for actually preparing the registration must sign this part. A registration will be considered incomplete unless all required signatures are provided.

For New Registrants:

" I hereby certify that I am making this certification in connection with a registration under such general permit,

[INSERT NAME OF REGISTRANT BELOW]

submitted to the commissioner by _____ for

[INSERT ADDRESS OF PROJECT OR ACTIVITY BELOW]

an activity located at _____ and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(*b*) (8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(*b*)(8)(B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

For Re-registrants:

" I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner

[INSERT NAME OF REGISTRANT BELOW]

by _____ for an activity located at

[INSERT ADDRESS OF PROJECT OR ACTIVITY BELOW]

_____ and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that all designs and plans for such activity meet the current terms and conditions of the general permit in accordance with Section 5(b)(5)(C) of such general permit and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(*b*)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Registrant (Must be an original signature, not a copy or fax)	Date
Name of Registrant (print or type)	Title (if applicable)
Signature of Preparer (if different than above) (Must be an original signature, not a copy or fax)	Date
Name of Preparer (print or type)	Title (if applicable)

Part VIII: Professional Engineer (or Landscape Architect, where appropriate) Design Certification (for publically approvable and exempt projects)

The following certification must be signed by a Professional Engineer or Landscape Architect where appropriate.

"I hereby certify that I am a choose qualification licensed in the State of Connecticut. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by

[INSERT NAME OF REGISTRANT BELOW]

for an activity located at

[INSERT ADDRESS OF PROJECT OR ACTIVITY BELOW]

.

I certify that I have thoroughly and completely reviewed the Stormwater Pollution Control Plan for the project or activity covered by this certification. I further certify, based on such review and on the standard of care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Quality Manual, as amended, and the conditions of the general permit, and that the controls required for such Plan are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate, and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement in this certification may subject me to sanction by the Department and/or be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Design Professional (Must be an original signature, not a copy or fax)	Date
Name of Professional (print or type)	Title
Mailing Address	City/Town
State Zip Code	Business Phone
	License #
Affix P.E/L.A Stamp Here	

Part IX: Reviewing Qualified Professional Certification

The following certification must be signed by a) a Conservation District reviewer OR, b) a qualified soil erosion and sediment control and/or professional engineer

☐ **Review certification by Conservation District:**

1.) District: list of districts

Date of Affirmative Determination:

" I am making this certification in connection with a registration under General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner

[INSERT NAME OF REGISTRANT BELOW]

by _____ for an activity located at

[INSERT ADDRESS OF PROJECT OR ACTIVITY BELOW]

_____.

I have personally examined and am familiar with the information that provides the basis for this certification, and I affirm, based on the review described in Section 3(*b*)(11)(C) of this general permit and on the standard of care for such projects, that the Stormwater Pollution Control Plan is adequate to assure that the activity authorized under this general permit will comply with the terms and conditions of such general permit and that all stormwater management systems: (i) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable and that conform to those in the Guidelines and the Stormwater Quality Manual; (ii) will function properly as designed; (iii) are adequate to ensure compliance with the terms and conditions of this general permit; and (iv) will protect the waters of the state from pollution."

_____

Signature of District Professional and Date (Must be an original signature, not a copy or fax)

_____

Name of District Professional and License Number (if applicable)

Or

☐ **Review certification by Qualified Professional**

Company: _____

Name: _____

License # : _____

Level of independency of professional:

Required for all projects disturbing over 1 acre:

1. I verify I am not an employee of the registrant. ☐ Yes
2. I verify I have no ownership interest of any kind in the project for which the registration is being submitted. ☐ Yes

Required for projects with 15 or more acres of site disturbance (in addition to questions 1&2):

3. I verify I did not engage in any activities associated with the preparation, planning, designing or engineering of the soil erosion and sediment control plan or stormwater management systems plan for this registrant. ☐ Yes
4. I verify I am not under the same employ as any person associated with the preparation, planning, designing or engineering of the soil erosion and sediment control plan or stormwater management systems plan for this registrant. ☐ Yes

Part IX: Reviewing Qualified Professional Certification (continued)

"I hereby certify that I am a qualified professional engineer or qualified soil erosion and sediment control professional, or both, as defined in the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and as further specified in Sections 3(*b*)(11)(A) and (B) of such general permit. I am making this certification in connection with a registration under such general permit,

[INSERT NAME OF REGISTRANT BELOW]

submitted to the commissioner by _____

[INSERT ADDRESS OF PROJECT OR ACTIVITY BELOW]

for an activity located at _____.

I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(*b*)(11)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination in accordance with Sections 3(*b*)(11)(D)(i) and (ii) of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

_____

Signature of Reviewing Qualified Professional Date: _____

(Must be an original signature, not a copy or fax)

_____

Name of Reviewing Qualified Professional License No.: _____

Affix P.E./L.A. Stamp Here

Part X: Supporting Documents

Select the applicable box below for each attachment being submitted with this registration form. When submitting any supporting documents, please label the documents as indicated below (e.g., Attachment A, etc.) and be sure to include the registrant's name as indicated on this certification form.

☐	**Attachment A:**	Select here as verification that an 8 ½" X 11" copy of the relevant portion of a USGS Quadrangle Map with a scale of 1:24,000, showing the exact location of the facility has been submitted with this registration. Indicate the quadrangle name on the map, and be sure to include the registrant's name. (To obtain a copy of the relevant USGS Quadrangle Map, call your town hall or DEEP Maps and Publications Sales at 860-424-3555)
☐	**Attachment B:**	Documentation related to *Coastal Consistency Review,* if applicable.
☐	**Attachment C:**	Threatened and Endangered Species Form and any additional information (such as a copy of a NDDB map)
☐	**Attachment D:**	Conservation or Preservation Restriction Information, if applicable.
☐	**Attachment E:**	Where applicable, non-electronic Pollution Control Plan.

Note: Please submit the fee along with a completed, printed and signed Registration Form and all additional supporting documents to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

ATTACHMENT C: THREATENED AND ENDANGERED SPECIES

Information about compliance with the requirements of Section 3(b)(2) of this general permit, regarding threatened and endangered species, is in Appendix A of the general permit. Choose one or more (if applicable) of the following in order to be eligible to register for this General Permit. A registrant who does not or cannot do so is not eligible to register under this General Permit.

☐ Self Assessment using the NDDB maps – Select this only if:

a. The site of the construction activity is not entirely, partially or within a ¼ mile of a shaded area depicted on the Department's Natural Diversity Database maps and this determination was made not more than six months before the date of submitting this registration;

AND

b. The entity registering for this General Permit has no reasonably available verifiable scientific, or other credible information that the construction activity could reasonably be expected to have an adverse impact upon a federal or state species listed as threatened or endangered.

Attach a copy of the NDDB map used to conduct the self assessment used to register for this general permit.

Note: Both a and b as used in this section, must be true in order for a Registrant to register for this General Permit using the self-assessment option. If neither is true, a Registrant cannot use the self-assessment option to comply with Section 3(b)(2) and Appendix A of the General Permit.

☐ Limited One-Year Determination – Select this only if:

a. The entity registering for this General Permit has obtained a limited one-year determination from the Department's Wildlife Division regarding threatened and endangered species: i) within a year of the date of submitting this registration; or ii) more than 1 year before submitting this registration, but such determination has been extended by the Department within one year of the date of submitting this registration;

AND

b. The Registrant has provided to the Department's Wildlife Division any reasonably available verifiable scientific, or other credible information that the construction activity could reasonably be expected to have an adverse impact upon a federal or state species listed as threatened or endangered.

Provide the date the limited one-year determination was issued by the Department's Wildlife Division _____;

or

Provide the date that the most recent extension to a limited one year determination was issued by the Department's Wildlife Division _____.

Note: Both a and b as used in this section, must be true in order for a Registrant to register for this General Permit using the Limited One-Year Determination option. If a Limited One-Year Determination or extension to any such determination was issued by the Department's Wildlife Division more than one year before the submission of this registration, a Registrant cannot use any such determination or extension to comply with Section 3(b)(2) and Appendix A of the General Permit.

ATTACHMENT C: THREATENED AND ENDANGERED SPECIES (continued)

☐ **Select here if the Limited One-Year Determination issued by the Department includes a Mitigation Plan.**

Provide the date the Mitigation Plan was approved: _____

Governmental Entity Approving the Plan: _____

As of the date this Registration is submitted,

Has the Mitigation Plan been fully implemented? ☐ Yes ☐ No

Date commenced: _____ Date completed: _____

Is the Mitigation Plan partially implemented? ☐ Yes ☐ No

If yes, what actions have been taken? _____

And which actions are yet to be implemented and what is the timeframe for completion of such actions: _____

Is the Mitigation Plan yet to be implemented? ☐ Yes ☐ No

If yes, specify the timeframe for implementation: _____ to _____

And summarize actions to be implemented: _____

☐ Safe Harbor Determination - Select this only if:

a. The entity registering for this General Permit has obtained a Safe Harbor Determination from the Department's Wildlife Division regarding threatened and endangered species: i) within 3 years of the date of submitting this registration; or ii) more than 3 years before submitting this registration, but within one-year of a one-year extension issued by the Department's Wildlife Division to a safe harbor determination;

AND

b. The entity registering for this General Permit has provided to the Department's Wildlife Division any reasonably available verifiable scientific, or other credible information that the construction activity could reasonably be expected to have an adverse impact upon a federal or state species listed as threatened or endangered.

Provide the date the Department's Wildlife Division issued a Safe Harbor Determination: _____

If applicable, provide the date that any one-year extension to a Safe Harbor Determination was issued by the Department's Wildlife Division: _____.

Note: Both a and b as used in this section, must be true in order for a Registrant to register for this General Permit using the Safe Harbor Determination option. If a Safe Harbor Determination was issued by the Department's Wildlife Division more than three years before the submission of this registration, and has not been extended, a Registrant cannot use any such safe harbor to comply with section 3(b)(2) and Appendix A of this General Permit. If a Safe Harbor Determination was granted and extended for one-year, more than four years before the submission of this registration, a Registrant cannot use any such Safe Harbor Determination to comply with Section 3(b)(2) and Appendix A of the general permit.

ATTACHMENT C: THREATENED AND ENDANGERED SPECIES (continued)

☐ **Select here if the safe harbor noted above includes a Mitigation Plan.**

Provide the date the Mitigation Plan was approved: _____

Governmental Entity Approving the Plan: _____

As of the date this Registration is submitted,

Has the Mitigation Plan been fully implemented? ☐ Yes ☐ No

Date commenced: _____ Date completed: _____

Is the Mitigation Plan partially implemented? ☐ Yes ☐ No

If yes, what actions have been taken? _____

And which actions are yet to be implemented and what is the timeframe for completion of such actions: _____

Is the Mitigation Plan yet to be implemented? ☐ Yes ☐ No

If yes, specify the timeframe for implementation: _____ to _____

And summarize actions to be implemented: _____

APPENDIX J
LICENSE TRANSFER FORM

Connecticut Department of
Energy & Environmental Protection

License Transfer Form

CPPU USE ONLY
App #:_____
Doc #:_____
Check #:_____
_____

Please complete and submit this form and the appropriate non-refundable transfer fee(s), in accordance with the instructions, to the CT Department of Energy and Environmental Protection, Central Permit Processing Unit, 79 Elm Street, Hartford, CT 06106-5127. DEEP will notify both the proposed transferee and the licensee of the approval or disapproval of the registration. Print or type unless otherwise noted.

Part I: License Type and Fee Information

License Type: (check all that apply)	No. of licenses	Transfer Fee for *each* license	Fee Subtotal
☐ *__Air Emissions__ ☐ NSR Permit, GPLPE Approval, and/or Registration pursuant to the former RCSA section 22a-174-2		$940.00	
☐ Title IV **and** Request for Title IV Revision		$940.00	
App#:			
☐ Title V **and** Request for Title V Revision		$940.00	
App#:			
☐ **Aquifer Protection Area Program**		$750.00	
☐ ***Inland Water Resources:** Water Diversion, Flood Management, Inland Wetlands and Watercourses, Dam Safety, Stream Channel Encroachment Lines, 401 Water Quality Certification		$750.00	
☐ ***Office of Long Island Sound Program:** Structures, Dredging and Fill; Tidal Wetlands; Removal of Sand and Gravel (Marine Mining); 401 Water Quality Certification		$0	
☐ ***Waste and Materials Management:** Solid Waste Facilities, Solid Waste Landfills, RCRA Hazardous Waste TSDF's, Hazardous Waste Landfills, CGS section 22a-454 Waste Facilities, Stewardship Permits, Waste Transportation		$940.00	
☐ Electronic Waste – Covered Electronic Recycler (CER) Approval		$0	
☐ ***Water Discharges**		$940.00	
***Refer to the List of General Permits Fact Sheet to determine which General Permit Registrations are transferrable.** **Fee Total**			

Part I: License Type (continued)

Date of Closing: ☐ Proposed ☐ Actual

If the closing takes place after submittal of this completed form and before the license transfer is approved, you must complete and submit a *Confirmation of Closing – Before License Transfer Approval Form* (attached) immediately after said closing to confirm the change in ownership of the facility.

If the closing takes place after the license transfer is approved, you must complete and submit a *Confirmation of Closing – After License Transfer Approval Form* immediately after said closing to confirm the change in ownership of the facility and for the license transfer to be effective.

Table A: Licenses Being Transferred

License Type	License Number	Expiration Date

☐ Check the box if you have more licenses you are proposing to transfer. If so, label and attach additional sheet(s) with the above information for each license.

Table B: Other Licenses or Regulated Activities Not Being Transferred

License Type	License Number	Expiration Date	Continuing Activity?		Reason for not transferring
			Yes	No	
			☐	☐	
			☐	☐	
			☐	☐	

☐ Check the box if you have more licenses to identify. If so, label and attach additional sheet(s) with the above information for each license.

Table C: Pending Applications or Enforcement Actions

Name of Application or Enforcement Action	Application or Enforcement Case Number	Date of Submittal or Enforcement Action

☐ Check the box if you have more applications or actions to identify. If so, label and attach additional sheet(s) with the above information for each license.

Part II: General Information

1. Name of Site:

Street Address or Description of Location:

City/Town: State: Zip Code:

2. Current Licensee

Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

Contact Person: Phone: ext.

E-mail:

☐ Check the box if there is more than one licensee.
If so, label and attach additional sheet(s) with the above information for each licensee.

- ***If a registrant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, registrant's name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of State's database (CONCORD).* ***(www.concord-sots.ct.gov/CONCORD/index.jsp)***
- *If a registrant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).*

3. Proposed Transferee (Registrant)

Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

Contact Person: Phone: ext.

*E-mail:

*By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject registration. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes.

a) Registrant Type (check one):

☐ individual ☐ federal agency ☐ state agency ☐ municipality ☐ tribal

☐ *business entity (*If a business entity complete i through iii):

Part II: General Information (continued)

i) check type: ☐ corporation ☐ limited liability company ☐ limited partnership
☐ limited liability partnership ☐ statutory trust ☐ Other: _____

ii) provide Secretary of the State business ID #:_____This information can be accessed at *database (CONCORD).* **(www.concord-sots.ct.gov/CONCORD/index.jsp)**

iii) ☐ Check here if your business is **NOT** registered with the Secretary of State's office.

b) Registrant's interest in property at which the proposed activity is to be located:

☐ site owner ☐ option holder ☐ lessee ☐ easement holder
☐ facility owner ☐ operator ☐ other (specify): _____

☐ Check if any additional proposed transferees or co-registrants. If so, attach additional sheet(s) with the required information as requested above.

4. New Billing Contact, if different than the registrant.

Name:
Mailing Address:
City/Town: State: Zip Code:
Business Phone: ext.:
Contact Person: Phone: ext.
E-mail:

5. New Primary Contact for departmental correspondence and inquiries, if different than the registrant.

Name:
Mailing Address:
City/Town: State: Zip Code:
Business Phone: ext.:
Contact Person: Phone: ext.
*E-mail:

*By providing this e-mail address you are agreeing to receive official correspondence from the department, at this electronic address, concerning the subject registration. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify the department if your e-mail address changes.

6. New Authorized Representative, if applicable.

Name:
Mailing Address:
City/Town: State: Zip Code:
Business Phone: ext.:
Contact Person: Phone: ext.
E-mail:

Part II: General Information (continued)

7. New Attorney, if applicable.

Firm Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

Attorney Name: Phone: ext.

E-mail:

8. New Site Owner, if different than the registrant.

Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

Contact Person: Phone: ext.

E-mail:

9. New Facility Owner, if different than the registrant.

Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

Contact Person: Phone: ext.

E-mail:

10. New Facility Operator, if different than the registrant.

Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

Contact Person: Phone: ext.

E-mail:

11. Preparer of this registration, if different than the registrant.

Name:

Mailing Address:

City/Town: State: Zip Code:

Business Phone: ext.:

Contact Person: Phone: ext.

E-mail:

Part III: Supporting Documents

Be sure to read the instructions (DEEP-INST-006) to determine all documents that must be submitted with this registration form. Check the applicable boxes as verification that *all applicable* attachments have been submitted with this registration form. When submitting any supporting documents, please label the documents as indicated in this part (e.g., Attachment A, etc.) and be sure to include both the licensee and the proposed transferee's name.

☐ Attachment A: *Applicant Background Information* (DEEP-APP-008) (if applicable) (Do ***not*** include for transfer of licenses for solid waste facilities)

☐ Attachment B: *Applicant Compliance Information* (DEEP-APP-002)

☐ Attachment C: Submit the following only in the case where the closing has occurred **after** submittal of the license transfer registration form and ***before*** the department has approved the transfer of licenses.

- submit a completed *Confirmation of Closing Form* (DEEP- APP-006B) once such closing has been completed to the address indicated on the form. (attached)

☐ Attachment D: *Submit the following only for transfer of licenses for CGS Section 22a-454 Facilities, Hazardous Waste Landfills, RCRA Hazardous Waste TSDF's and Stewardship Permits:*

1. Business Information
2. Financial Assurance
3. *Revised EPA RCRA Part A and RCRA Part B application*

☐ Attachment E: *Submit the following only for transfer of licenses for Solid Waste Facilities and Solid Waste Landfills:*

1. *Background information* (DEEP-SW-APP-101)
2. *Business Information* (DEEP-SW-APP-103)

☐ Attachment F: *Submit the following only for transfer of licenses for Waste Transporters*:

1. *List of Transporter Permits Held in Other States* (DEEP-WEED-APP-401)
2. Certificate of Insurance and MCS-90 Forms
3. *Spill Clean-up Contractor Application* (DEEP-WEED-APP-407), if applicable
4. Additional Registrant Information

☐ Attachment G: *Submit the following only for transfer of licenses administered by OLISP pursuant to statutes regulating work in tidal, coastal or navigable waters or tidal wetlands:*

1. A copy of the permit drawings identifying the components of the project that have been completed and the portion of the project or work elements that remain to be conducted.
2. Photographs or other documentation showing that the completed work has been constructed/conducted in accordance with the permit. If the work authorized consisted of dredging, provide a current bathymetric survey of the dredged area.

Part III: Supporting Documents

☐ Attachment H: *Submit the following only for transfer of Title V licenses:*

- *Written Authorization Form RCSA Section 22a-174-2a(a)(2)(B)* (DEEP-AIR-SIG-REG-002), **IF APPLICABLE**.

☐ Attachment H-1: *Submit the following only for transfer of Title IV licenses or Title V licenses **with** a Title IV license incorporated:*

- a completed *EPA Phase II Acid Rain Permit Application Form* (EPA Form 7610-16) signed by the new designated representative or alternate designated representative. A copy should also be sent to EPA Region 1: Mr. Ian Cohen, US EPA, 5 Post Office Square, Suite 10, Mail Code O(o)EP0(zero)5-2, Boston, MA 02109-3912

☐ Attachment I: *Submit the following only for transfer of registrations and permits for the Aquifer Protection Area Program:*

- *Certification of Best Management Practices (found on p.5 of 7 of the Registration Form for Regulated Activities in Aquifer Protection Areas) (DEEP-APA-REG-100)*
- *Certification of Best Management Practices (found on p.7 of 9 of the Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area) (DEEP-APA-APP-200)*

For transfer of registrations and permits for the Aquifer Protection Area Program, a copy of this completed form and the *Certification of Best Management Practices* to the municipality, the Department of Public Health and any affected water company.

For contact names and addresses refer to:

Municipal Contact Directory

Water Company Contact Directory

Connecticut Department of Public Health
Drinking Water Division
410 Capitol Avenue, MS #51 WAT
Hartford, CT 06134-0308

☐ Attachment J: *Submit the following only for transfer of an existing CER Approval:*

- ***Description of Applicant's Qualifications and Relevant Experience*** **(DEEP-WASTE-APP-002B)**

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Part IV: Certification

The licensee(s) *and* the proposed transferee(s) and the individuals responsible for actually preparing the registration must sign this part. A registration will be considered insufficient unless *all* required signatures are provided ***and are the proper signatory authority as specified under Part IV in the instructions.*** To expedite the registration review, if the subject business entities are registered with the Secretary of State's database (CONCORD), the authorized representative for the current licensee and proposed transferee should be listed as a principal, and also listed in the Applicant Background Information (Attachment A) submitted with this complete registration. If the authorized representative is not listed in CONCORD, please provide documentation that verifies the signatory is authorized to sign on behalf of the business entity.

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I certify that this license transfer registration and if applicable, the request for Title IV and/or Title V Revision, is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

I understand that this transfer shall become effective immediately upon the commissioner's written approval of this request, or within the time frame specified in the subject approval. I understand that there are significant penalties for conducting any activity requiring a license from DEEP without the required license. I understand that this license transfer registration form is only to be used for changes in owners and operators of the licensed activity; if other changes are being proposed to the facility or site or facility operations, the proposed transferee must also request a license modification.

I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Signature of Authorized Representative for Current Licensee	Date
Printed Name of Authorized Representative for Current Licensee	Title (if applicable)

License Number(s):

"In addition to the above certification statement, by signing below as transferee, I hereby further certify that I am willing and able to fully comply with the terms and conditions of the license(s) referenced in this document."

Signature of Authorized Representative for Proposed Transferee	Date
Printed Name of Authorized Representative for Proposed Transferee	Title (if applicable)
Signature of Preparer	Date
Name of Preparer (print or type)	Title (if applicable)

☐ Check the box if additional signatures are necessary. If so, please reproduce this sheet and attach signed copies to this sheet.

Connecticut Department of
Energy & Environmental Protection

Confirmation of Closing – Before License Transfer Approval

Complete this form only in the case where the closing has occurred after submittal of the license transfer registration form and ***before*** the department has approved the transfer of licenses. Once such closing has been completed submit this form to the applicable address indicated below, confirming the completion of the change in ownership of the facility.

To be completed by Transferee (registrant):

The undersigned confirm that the change in ownership of the _____
[address of facility]

facility from _____ to _____
[name of transferor – current license holder] [name of transferee - registrant]

occurred on the following date., _____
[date of closing]

Signature of Authorized Representative for Transferee

Printed Name of Authorized Representative for Transferee

Title of Authorized Representative for Transferee

Please submit this completed form, a copy of the department license transfer approval and any supporting documents to:

For multi-media license transfer requests (for example, transferring a waste, water and air license):	*For single media license transfer requests (for example , only transferring air licenses):*
OFFICE OF PLANNING AND PROGRAM DEVELOPMENT, 3RD FLOOR **DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION** **79 ELM STREET** **HARTFORD, CT 06106-5127** **ATTENTION: BOB HANNON**	**[INSERT APPLICABLE PROGRAM, for example, "AIR ENGINEERING]** **DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION** **79 ELM STREET** **HARTFORD, CT 06106-5127** **ATTENTION: [INSERT Program Staff Name]**

Connecticut Department of
Energy & Environmental Protection

Instructions for Completing a License Transfer Form

Use these instructions to: 1) complete the License Transfer Form DEEP-APP-006 and 2) prepare supporting documents. These instructions are not a substitute for the requirements of the relevant statutes and any regulations thereunder. You should review all applicable laws prior to completing this registration. Remember, it is your responsibility to comply with all applicable laws.

Introduction

Pursuant to section 22a-6o of the Connecticut General Statutes (CGS), no person may act under a Department of Energy and Environmental Protection (DEEP) license issued to someone else unless such license has been transferred to such a person. A transfer is only effective if DEEP notifies the licensee and transferee that the license has been transferred. Under the law, the licensee and proposed transferee (transferee) must register the proposed transfer of ownership of a licensed facility or activity within thirty days of the transfer of ownership. However, DEEP strongly recommends submitting such transfer registration *prior* to the actual transfer of the facility. For the transfer of Resource Conservation and Recovery Act (RCRA) licenses, the licensee and transferee must register the proposed transfer of ownership at least *90* days prior to the transfer. Note that no person may conduct an activity requiring a license from DEEP without first obtaining such license. Please note a transfer of property may also trigger the requirement that the parties file under the property transfer law CGS sections 22a-134 through 22a-134e. For further information call the Property Transfer Program at 806-424-3705.

If you are applying for a transfer of a RCRA license, a National Pollutant Discharge Elimination System (NPDES) license, or an Air license, the transfer must be consistent with the requirements of the applicable federal law. Refer to the "Supporting Documents" section of these instructions for specific requirements applicable to the transfer of particular licenses.

If the commissioner determines that the transferee is able to comply with the terms and conditions of the existing license, DEEP will notify both parties confirming the registration and acknowledging the applicability of the license to the transferee. Upon receipt of DEEP approval of the transfer, the new licensee shall comply with all the terms and conditions of the license transferred for the remaining period of time the existing license is in effect. Please note, DEEP may require information in addition to the *License Transfer Form* to determine whether the transferee can comply with the terms and conditions of the license. The transferee may not conduct the activity without first receiving notice confirming the registration and acknowledging the applicability of the license.

Who Needs to Register?

Any person proposing to transfer a DEEP license to another person must submit a *License Transfer Form* (DEEP-APP-006) and transfer fee to DEEP. The *License Transfer Form* may only be used for changes in ownership or operators of the licensed activity; if other

changes are proposed to the facility, the site, and/or to facility operations, the transferee must also obtain a license modification. For further information concerning license transfers or modifications, please refer to the "Available Resources" section at the end of these instructions for a listing of telephone numbers to contact each program area within the department.

How To Register

Your registration must include the following:

- A *License Transfer Form* (DEEP-APP-006) and all supporting documents;

- The applicable non-refundable transfer fee, paid by check or money order, made payable to the "Department of Energy and Environmental Protection".

You must submit the above materials together as a package to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

When submitting your *License Transfer Form*, label your supporting documents as directed on the form and always include, on each document, the current licensee's name as well as the transferee's name. You should retain a copy of all documents for your files.

For the purpose of completing a *License Transfer Form,* the transferee is considered the registrant/applicant.

License Transfer Instructions (DEEP-APP-006)

Please read the *License Transfer Form* and instructions carefully. They have been designed to obtain specific information. Any information that is missing or unclear will cause delays in the review process. If any question is not applicable to your specific activity, please enter "N/A" in the space provided. If a question or supporting document is only required for specific activities, it will be noted on the registration form and in the instructions.

Please be advised that these instructions are not a substitute for any state or federal statutes or regulations. Be sure to refer to the applicable statutes and regulations while completing your registration form.

Check the "Available Resources" section at the end of these instructions for obtaining additional assistance.

Part I: License Type and Fee Information

Please indicate, by checking the appropriate spaces, which license types are subject to transfer. Also indicate the number of licenses subject to transfer for each license type. The transfer fee identified on the *License Transfer Form* must be submitted for *each* license proposed to be transferred.

Use one *License Transfer Form* when one or more licenses are proposed to be transferred to the same owner(s) or operator(s) on one site. Use a separate *License Transfer Form* for each license with a different proposed new owner or operator or a different site.

Transferrable General Permit Registrations:

Refer to the List of General Permits Fact Sheet to determine which General Permit Registrations are transferrable.

Identify the date of closing of the facility. Indicate whether the date stated is the proposed or actual date of the closing.

- If the closing takes place after submittal of the license transfer registration form and before the license transfer is approved, you must complete and submit a *Confirmation of Closing – Before License Transfer Approval Form* immediately after said closing to confirm the change in ownership of the facility.

- If the closing takes place after the license transfer is approved, you must complete and submit a *Confirmation of Closing – After License Transfer Approval Form* immediately after said closing to confirm the change in ownership of the facility and for the license transfer to be effective.

Table A: Licenses Being Transferred

Identify the licenses subject to transfer by indicating the license type, license number and expiration date of the existing license.

Table B: Other Licenses or Regulated Activities Not Being Transferred

Identify any licenses or regulated activities **not** being transferred by indicating the license type, license number and expiration date of the existing license. Also indicate whether or not the licensed or regulated activity will continue and the reason for not transferring.

Table C: Pending Applications/Enforcement Actions

Identify any pending applications or enforcement actions by indicating the application name or the enforcement action, the application or enforcement case number and the date the application was submitted or the date of the enforcement action.

Part II: General Information

1. Identify the site by name or project name and number. The name of the site should be the name by which the site is commonly known and/or uniquely identified.

   Provide the address of the site at which the licensed activity takes place. Include the street address and municipality. If the site does not have a street number, describe the location in terms of the distance and direction from an obvious landmark such as an intersection with another roadway, a bridge, or a river. For example, ". . . on River Street, approximately 1,000 feet north of its intersection with Bear Swamp Road."

   When completing this part, please use the following standards:

   - *Name* - Provide the *full, legal company/firm name*. (If identifying an entity registered with the Secretary of the State, fill in the name exactly as it is shown on the registration.) This information can be accessed at CONCORD. If identifying an *individual*, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr., Sr., II, III, etc.).

   - *Phone* - Unless otherwise indicated, the phone number provided should be the number where the individual can be contacted during daytime business hours.

   - *Contact Person* - Provide the name of the specific individual within the company whom DEEP may contact.

   - *E-Mail* – Registrants must provide an accurate e-mail address when completing their registration form. The e-mail address may be used for future correspondence from the DEEP to your business.

2. *Current Licensee* – Complete the information concerning the current licensee.

3. *Transferee* – Complete the information concerning the transferee.

4. *New Billing Contact* – If the registrant is not the billing contact, complete this section.

5. *New Primary Contact* - If you have authorized a consultant, engineer, attorney or other individual to act for *you* during the processing of the transfer registration, complete this section. DEEP will direct copies of all correspondence and inquiries to this primary contact.

6. *New Authorized Representative* – (If

applicable). The individual who has been designated to sign the subject registration on behalf of the transferee. This individual must be an entity listed as proper signatory under Part IV of these instructions.

7. *New Attorney* - It is not required that a licensee or transferee be represented by an attorney or any other agent. If you do have an attorney, complete this section.

8. *New Site Owner* - Please list the owner of the site at which the licensed activity is conducted, if different than the transferee.

9. *New Facility Owner* – Please list the owner of the facility at which the licensed activity is conducted, if different than the transferee.

10. *New Facility Operator* - List the entity responsible for *managing* the facility operation. The operator may be different than the owner. Examples of separate owner and operator are a lessee of the land or buildings on which the facility is located, or a person under contract specifically to conduct the day-to-day business of the facility.

11. *Preparer* – List the entity that has prepared the subject registration, if different than the transferee.

Part III: Supporting Documents

All *License Transfer Forms* must include the Attachments A through J, unless otherwise noted in these instructions. Check the box by each applicable attachment as verification that the attachment has been submitted. Please label all attachments as referenced in the *License Transfer Form* and these instructions and be sure to include the name of the licensee as it exists on the license and the name of the transferee.

Note: Refer to the "Summary of License Types and Supporting Documents/Attachments" at the end of these instructions for documentation that must be submitted for each type of license you are proposing to transfer.

Attachment A: Applicant Background Information

A completed Applicant Background Information Form (DEEP-APP-008) must be submitted as Attachment A for all license transfers, except for solid waste facilities and landfills. For transferring such solid waste licenses, the information detailed for Attachment E must be submitted.

Attachment B: Applicant Compliance Information Form

Section 22a-6m of the Connecticut General Statutes provides for DEEP review of a registrant's record of compliance with the environmental laws of Connecticut, any other state and the federal government. Under the law, DEEP may consider the registrant's environmental compliance record, as well as the record of the registrant's principals and any parent companies or subsidiaries, when reviewing a license transfer registration. All license transfer registrations must include a completed *Applicant Compliance Information Form* (DEEP-APP-002) as Attachment B.

Attachment C: Confirmation of Closing

Submit a completed *Confirmation of Closing Form – Before License Transfer Approval* (DEEP- APP-006B) as Attachment C **only** in the case where the closing has occurred after submittal of the license transfer registration form and before the department has approved the transfer of licenses. Once such closing has been completed, submit the completed form to the address indicated on the form.

Attachment D: *Submit the following as Attachment D, only for transfer of licenses for CGS Section 22a-454 Facilities, Hazardous Waste Landfills, RCRA Hazardous Waste TSDF's and Stewardship Permits:*

1. ***Business Information***

Facility Ownership, Control and Use Agreements: The transferee must provide signed copies of any lease, deed or other agreements regarding the ownership, control, or use of the facility. Such documents include but are not limited to the following: land deeds (e.g., warranty deed; certified deed; lease agreement; Schedule A; etc.)

Agreements Between Parties and Service Agreements and Contracts: Provide copies of all contracts and agreements with markets, users and final disposal sites (e.g., bridge agreements; agreements between the transferee and owner, operator, municipality(s), regional authority, markets, disposal facility(s), other processing facilities, etc.).

Also include an organization chart, which illustrates the relationship among all parties involved in the ownership and management of the facility.

2. ***Financial Assurance***

   Financial assurance mechanisms must be identified and submitted as Attachment C. Acceptable financial assurance mechanisms are discussed in the draft guidance document "Non-RCRA Hazardous CGS section 22a-454 Waste Facility Standards and Guidance for Commercial Operations" (rev. 6/92).

3. *For **RCRA Facilities Only - Completed EPA Application for a Hazardous Waste Permit - Part A and Part B** (Submit only for transfer of: 1) licenses for facilities which treat, store or dispose of their own **RCRA** hazardous waste (RCRA Hazardous Waste TSDF's), 2) licenses for **RCRA** post closure, and 3) licenses for CGS section 22a-454 **RCRA** Hazardous Waste Facilities and Landfills)*

   Please complete and submit an *EPA Application for a Hazardous Waste Permit - Part A*, as Attachment D. Please fill out this form in accordance with its instructions. The EPA application is considered part of the *License Transfer Form*. Please complete and submit any changes to the *RCRA Part B Permit Application and Application Checklist.* The revised permit application must be completed and submitted in accordance with 40 CFR Part 270.40.

Attachment E: *Submit the following only for transfer of licenses for Solid Waste Facilities and Solid Waste Landfills:*

1. ***Background Information*** (DEEP-SW-APP-101)

   Submit as Attachment E, on the form provided by DEEP, background information requested regarding the registrant, owner, and operator of the solid waste facility. If the registrant, owner and operator are different entities, copies of the form must be completed by each entity.

2. ***Business Information*** (DEEP-SW-APP-103)

   Submit as Attachment E, on the form provided by DEEP, the following business information for each facility. If you are transferring more than one license for multiple facilities located on the same site, be sure to identify the solid waste facility type that you are referring to on each document.

   Financial Stability Information: Include a detailed statement from a Certified Public Accountant which demonstrates the financial capacity of the registrant to develop and operate the project in a manner consistent with Connecticut environmental laws and standards.

   For a facility that is currently not in operation, with respect to the costs of financing, design, construction and start-up of the subject facility, provide the following information:

a. Estimated cost and identification of the source of funds for each facility;

b. Identification and discussion of the proposed method of financing costs which will not be paid from the registrant's own resources;

c. For costs to be paid from the registrant's own resources, demonstration that such resources are available (which may include third party assurances);

d. Has the registrant, or its affiliates, ever implemented a project of comparable magnitude? If so, explain.

If the proposed facility involves one million dollars or more in total capital cost, include a statement from an independent third party, certifying as to the reasonableness of such information.

For a facility currently in operation, with respect to the on-going operation of the facility, provide the following information:

a. An estimate of the cost of operating and maintaining the facility, and a discussion of the source of revenues to pay such costs;

b. A discussion of the financial capacity of the registrant to properly operate the facility, and the proposed method of addressing potential, unexpected costs associated with environmental compliance, breakdowns, malfunctions and related events;

c. If other parties will be responsible for the operation of the facility, demonstrate the ability of such parties to meet the financial capacity to do so.

Land Ownership Documents: In accordance with RCSA section 22a-209-4(b)(1), the registrant must provide signed copies of any lease, deed or other agreements regarding the ownership, control, or use of the facility by the registrant. Such documents include but are not limited to land deeds (e.g., warranty deed; certified deed; lease agreement; etc.).

Agreements Between Parties and Service Agreements and Contracts: Provide copies of all contracts and agreements (e.g., bridge agreements; agreements between the registrant and owner, operator, municipality(s), regional authority, markets, disposal facility(s), other processing facilities, etc.)

(Note: All contracts required pursuant to CGS section 22a-213 and RCSA section 22a-209-5 involving a municipality must be approved by DEEP.)

Organization Chart: Include an organization chart, which illustrates the relationship between all parties involved in the ownership and management of the facility (and signatory authority, if applicable).

Attachment F: *Submit Attachment F only for transfer of licenses for Waste Transporters:*

1. ***List of Transporter Licenses Held in Other States*** (DEEP-WEED-APP-401)

   Submit as Attachment F, on the form provided by DEEP, a list of all licenses held by the registrant in other states for the transportation of regulated wastes. Please identify the type of license, the state that issued the license, the license number and the expiration date.

2. ***Certification of Insurance***

   Submit as Attachment E, Certification of Insurance which includes:

   - an original Certificate of Insurance listing the Connecticut Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, 79 Elm Street,

Hartford, CT 06106-5127 as a certificate holder; and

- an MCS-90 Endorsement to the policy(ies) identified on the Certificate of Insurance to verify that the registrant has met the minimum levels of financial responsibility as required by 49 CFR Part 387.

3. ***Supplemental Application for Spill Clean-up Contractors*** (DEEP-WEED-APP-407)

   If you are applying for a transfer of a Spill Contractor Permit, submit as Attachment E, on the form provided by DEEP, a completed Spill Clean-up Contractor Application. Remember that if you are transferring a Spill Contractor Permit, you must also transfer the corresponding Hazardous Waste Transporter Permit.

4. ***Additional Registrant Information***

   If the registrant is a corporation, submit as Attachment F, the date, city and state of incorporation, and list the names, titles and addresses of all corporate officers.

   If the registrant, including all partners and corporate officers, engages in other activities or owns other companies that transport, treat, store, recover, or dispose of oil and chemical waste, hazardous waste, and/or biomedical waste, submit as Attachment F, identification of the owners of such companies or activities, the name of the company, the company address and the type of activities performed.

Attachment G: *Submit Attachment G only for transfer of licenses administered by OLISP pursuant to statutes regulating work in tidal, coastal or navigable waters or tidal wetlands:*

1. Submit as a portion of Attachment G, a copy of the permit drawings identifying the components of the project that have been completed and the portion of the project or work elements that remain to be conducted. If you do not have a copy of the approved drawings, please contact the Office of Long Island Sound Programs to obtain a copy.

2. Submit as a portion of Attachment G, photographs of the project site or other documentation that the completed work has been constructed/conducted in accordance with the permit. If the work authorized consisted of dredging, provide a current bathymetric survey of the dredged area.

Attachment H: *Submit Attachment H only for transfer of licenses for Title V:*

If applicable, complete and submit the *Written Authorization Form* (DEEP-AIR-SIG-REG-002) as Attachment H. Provide the name and title of the person(s) designated by the registrant as the authorized representative pursuant to RCSA section 22a-174-2a(a).

Attachment H-1: *Submit Attachment H-1 only for transfer of a Title IV license or a Title V license with a Title IV license incorporated within:*

A completed *EPA Phase II Acid Rain Permit Application Form* (EPA Form 7610-16) signed by the new designated representative or alternate designated representative. A copy should also be sent to EPA Region 1: Mr. Ian Cohen, US EPA, 5 Post Office Square, Suite 10, Mail Code O(o)EP0(zero)5-2, Boston, MA 02109-3912

Please note that the *Written Authorization Form* may not be necessary if already completed and approved by the Bureau for the signatory who has signed other documents being submitted. See RCSA section 22a-174-2a(a)(2)(B) for guidance.

Attachment I: *Submit Attachment I only for transfer of registrations and permits for the Aquifer Protection Area Program:*

- For Aquifer Protection Area Registrations, submit the *Certification of Best Management Practices* found on p.5 of 7 of the Registration Form for Regulated Activities in Aquifer Protection Areas

(DEEP-APA-REG-100)

- For Aquifer Protection Area Permits, submit the *Certification of Best Management Practices* found on p.7 of 9 of the Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (DEEP-APA-APP-200)

For transfer of registrations and permits for the Aquifer Protection Area Program, send a copy of the completed transfer form and the Certification of Best Management Practices to the municipality, the Department of Public Health and any affected water company.

For contact names and addresses refer to:

Municipal Contact Directory

Water Company Contact Directory

Connecticut Department of Public Health
Drinking Water Division
410 Capitol Avenue, MS #51 WAT
Hartford, CT 06134-0308

Attachment J: Description of Applicant Qualifications and Relevant Experience (DEEP-EWASTE-APP-002B)

Submit Attachment J only for transfer of an existing Covered Electronic Recycler (CER) Approval

Submit as Attachment J, a completed ***Description of Qualifications and Relevant Experience*** (DEEP-EWASTE-APP-002B) form. In order to be considered an approved CER, the applicant must demonstrate that they possess the experience and qualifications to manage electronic waste, specifically including CEDs. This can be demonstrated through the number of years the applicant has managed electronic waste including CEDs; the qualifications of the applicant including any titles held; trade association memberships; speaking engagements on electronics recycling; articles written; and any other relevant information.

1. Complete the table by listing current and previous projects and contracts over the past five (5) years in managing and recycling electronic waste, specifically including CEDs. In the corresponding columns, provide a description of each project or contract listed as well as a dollar value in price per pound, if ascertainable, for each. You must provide a dollar value for each project or contract listed;

2. List the number of years the applicant has managed electronic waste including CEDs;

3. List any relevant experience of the applicant including any titles held (e.g., previous owner or operator of recycling business);

4. List any awards, recognitions, certifications earned, current trade association memberships, articles written and speaking engagements. Attach copies of such awards, certifications, or membership information, etc.;

5. List any other relevant information that has not otherwise been described in this attachment.

Part IV: Registration Certification

After the *License Transfer Form* and all supporting documents have been completed they must be reviewed and signed by both the licensee(s) and the transferee(s) and the individual(s) who actually prepared the registration. By their signature, they certify that to the best of their knowledge and belief the information contained in the *License Transfer Form*, including all attachments, is true, accurate and complete.

The certification of the registration package must be signed as follows:

1. For an individual(s) or sole proprietorship: by the individual(s) or proprietor, respectively;
2. For a corporation: by a principal executive

officer of at least the level of vice president;

3. For a limited liability company (LLC): a manager, if management of the LLC is vested in a manager(s) in accordance with the company's "Articles of Organization", or a member of the LLC if no authority is vested in a manager(s);
4. For a partnership: by a general partner;
5. For a municipal, state, or federal agency or department: by either a principal executive officer, a ranking elected official, or by other representatives of such registrant authorized by law.

To expedite the registration review, if the subject business entities are registered with the Secretary of State's database (CONCORD), the authorized representative for the current licensee and proposed transferee should be listed as a principal, and also listed in the Applicant Background Information (Attachment A) submitted with this complete registration. If the authorized representative is not listed in CONCORD, please provide documentation that verifies the signatory is authorized to sign on behalf of the business entity.

In the case of a foreclosure, or dissolution, refer to CGS for proper signatory requirements and submit documentation of written consent to sign the subject registration on behalf of the *current licensee.*

A registration will be considered insufficient unless all required signatures are provided.

Available Resources

For further assistance in transferring licenses, contact the following:

Program	Phone
Air Emissions	860-424-4152
Aquifer Protection Area Program	860-424-3020
Inland Water Resources	860-424-3019
Office of Long Island Sound Program	860-424-3034
Waste Transportation	860-424-3366
Solid Waste Facilities (includes landfills)	860-424-3366
CGS Section 22a-454 Waste Facilities	860-424-3366
Hazardous Waste TSDF (includes landfills)	860-424-3366
Stewardship	860-424-3366
E-Waste	860-424-3372
Water Discharges	860-424-3018
Permit Assistance Office	860-424-3003

Affirmative Action, Equal Employment Opportunity and Americans with Disabilities

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.

Summary of License Types and Supporting Documents/Attachments

License Types	Attachments										
	A: Applicant Background Info	B: Applicant Compliance Info	C: Confirmation of Closing Form – Before License Transfer Approval (DEEP-APP-006B)	D: Business Information, Financial Assurance, RCRA Facilities: EPA RCRA Part A and Changes to Part B	E: Background Info, Business Info	F: Waste Transporter Info	G: Coastal License Info	H: Air Emissions – Signatory for Title V only	H-1: Air Emissions - Title IV, Title V info	I: Aquifer Protection Area Program Info	J: E-Waste- CER Approval Program Info
***Air Emissions**	●	●	○					○	●		
Aquifer Protection Area Program	●	●	○							●	
***Inland Water Resources**	●	●	○								
***Office of Long Island Sound Program**	●	●	○				●				
***Waste and Materials Management**											
Waste Transportation	●	●	○			●					
Solid Waste Facilities, Solid Waste Landfills		●	○		●						
Hazardous Waste Facilities, Landfills, RCRA Hazardous Waste TSDF, CGS section 22a-454 Waste Facilities, Stewardship Permits	●	●	○	●							
Electronic Waste – Covered Electronic Recycler Approval	●	●	○								●
***Water Discharges**	●	●	○								

● Supporting Documents/Attachments required to be submitted for each license type as part of the License Transfer Form
○ Supporting Documents/Attachments to be submitted for each license type as part of the License Transfer Form, **if applicable**

*Refer to the List of General Permits Fact Sheet to determine which General Permit Registrations are transferrable.

APPENDIX K
NOTICE OF TERMINATION FORM

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Notice of Termination Form

Please complete and submit this form in accordance with the general permit (DEP-PED-GP-015) in order to ensure the proper handling of your termination. Print or type unless otherwise noted.

Note: Ensure that for commercial and industrial facilities, registrations under the *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (DEP-PED-GP-014) or the *General Permit for the Discharge of Stormwater from Commercial Activities* (DEP-PED-GP-004) have been filed where applicable. For questions about the applicability of these general permits, please call the Department at 860-424-3018.

Part I: Registrant Information

1. Permit number: ***GSN***
2. Fill in the name of the registrant(s) as indicated on the registration certificate:

   Registrant:
3. Site Address:

   City/Town: State: Zip Code:
4. Date all storm drainage structures were cleaned of construction sediment:

   Date of Completion of Construction:

   Date of Last Inspection (must be at least three months after final stabilization pursuant to Section 6(b)(6)(D) of the general permit):
5. Check the post-construction activities at the site (check all that apply):

   ☐ Industrial ☐ Residential ☐ Commercial ☐ Capped Landfill

   ☐ Other (describe):

Part II: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Signature of Permittee	Date
Name of Permittee (print or type)	Title (if applicable)

Note: Please submit this Notice of Termination Form to:

STORMWATER PERMIT COORDINATOR
BUREAU OF WATER MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127